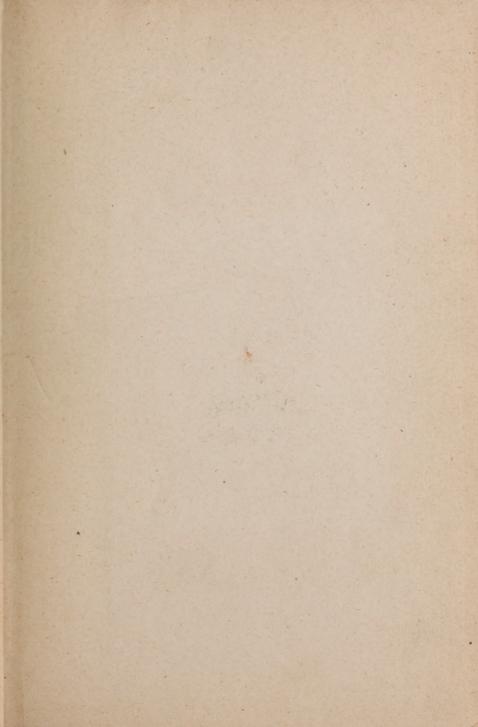
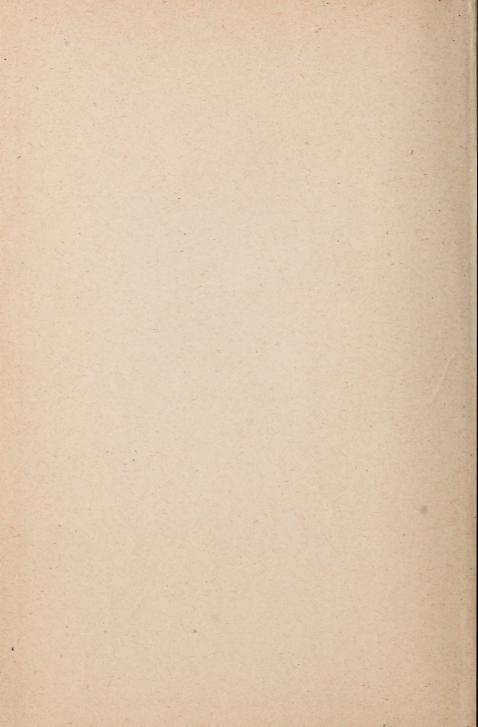
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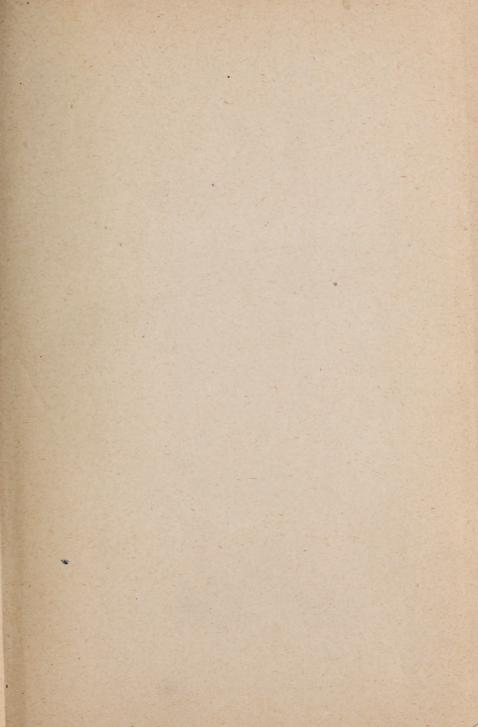


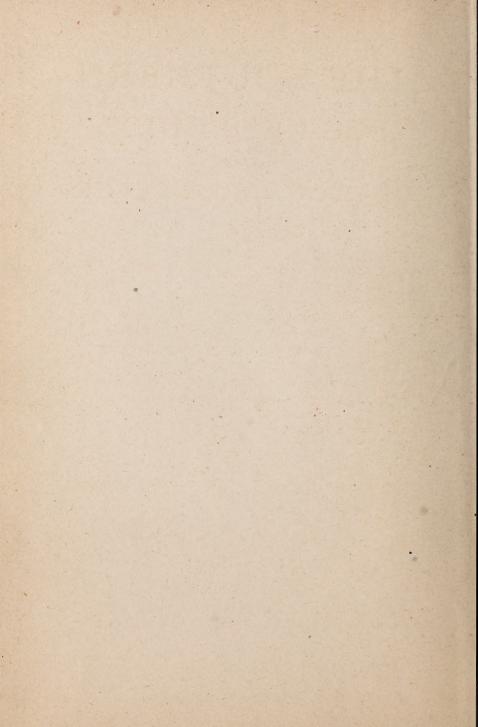
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THE SOUTHERN BUSINESS GUIDE

AND

COTTON CALCULATOR

EMBRACING THE LATEST AND SAFEST METHODS OF DOING BUSINESS IN THE RIGHT WAY, LEGAL FORMS AND METHODS USED IN COMMERCIAL AFFAIRS AND SPECIAL CHAPTERS ON CORRESPONDENCE, SWINDLES AND HOW TO AVOID THEM, FINANCE, BANKING, CONTRACTS AND RAPID CALCULATION, TOGETHER WITH COMPLETE TABLES FOR THE USE OF COTTON SELLERS, COTTON BUYERS, AND COTTON PICKERS, AND FOR SELLERS OF COTTON SEED . .

E.J. Roe

EDITED FOR PHIL BARBOUR JONES
WITH MANY ILLUSTRATIONS

NASHVILLE, TENN.

THE SOUTHWESTERN COMPANY
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PREFACE

HIS little work is intended as a safe and trustworthy guide to the proper transaction of all kinds of business.

It supplies the necessary legal and business information, together with the appropriate forms,

for the successful conduct of practical business of every description.

The matter it contains has not been gathered at random, or from out-of-date publications, but has been carefully prepared by practical specialists, experienced in the particular kinds of business of which they respectively treat.

Its collection of commercial and legal forms is so complete as to enable any person to readily draw up almost any kind of business document that may be required, including Contracts, Deeds, Leases, Mortgages, Bonds, Bills of Sale, Bills of Lading, Building Agreements, Articles of Partnership, Promissory Notes, Orders, Due Bills, Receipts, Powers of Attorney, Guarantees, Wills, etc.

The innumerable points of law and valuable business helps and hints it contains are not scattered haphazardly through the work, but are all arranged systematically, under appropriate headings, with index commencement words printed in bold-faced type, so that the eye of the reader catches the particular information wanted immediately.

Besides its legal and practical business information, the work contains: 1. Easy lessons in Penmanship, Bookkeeping, and Letter-writing, with helpful forms and illustrative examples of social, business, and official correspondence. 2. Exhaustive explanations of the various swindling schemes of the day, thoroughly exposing the dangerous confidence games and frauds by which honest farmers, bankers, merchants, and business men generally are daily defrauded out of their hard-earned money.

3. The latest census tables, interest, limitation, and exemption

laws of all the States, and a large amount of statistical information that cannot be found in any other publication. 4. Tables for rapid computation and ready information, constructed so simply that they can be easily understood and practically used by every one having the slightest knowledge of figures. 5. A miscellaneous collection of useful information pertaining to all the business and social relations of life.

Altogether it forms not only an almost indispensable safe counselor and guide for the business man, but also a convenient volume of general reference that is of incalculable value to every citizen.

E. T. ROE.

CHICAGO, ILL., June 1, 1904.

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OMMERCE is King," remarked Thomas Carlyle, and if the aphorism was true in his day, how much more truthful and pertinent is it at the present time! To it England owes her wealth, power, dominion and influence, and by means of it Amer-

ica bids fair to outstrip all history in the achievement of commercial success and importance.

The close and steadfast pressing of our material interests during the past twenty years; the wonderful inventive genius of our people, so richly productive in labor and time-saving devices and processes of manufacture, and their aggressive, inquisitive and enterprising spirit have combined to place this nation in the front ranks, if not in the lead, of the great civilized powers of the world. The political expansion of the United States is only a visible and symbolical representation of its growth in commerce, manufacture, art, education and general progress. With our varied climates extending now from the tropics to the frozen north, our vast seaboard, expansive lakes, broad, rolling rivers, exhaustless mineral and agricultural wealth, no argument is necessary to establish beyond peradventure the manifest destiny of this nation.



Business, in every age of the world, has been the chief pioneer in the march of man's civilization. Blessings everywhere follow its advancing footsteps. It travels over no bloodstained fields to secure its noble ends, but everywhere brings man into friendly and harmonious intercourse. It removes local prejudices, breaks down personal antipathies, and binds the whole family of man together by strong ties of association and of mutual and dependent interests. It brings men together, and towns and cities are built; it makes man venture upon the seas in ships, and traverse continents on iron pathways, and wherever we go, whether abroad or at home, it is business that controls the great interests of the world, and makes the affairs of men mighty.

SUCCESS

It is a matter of time and work; I shall get it yet. All I need to do is to keep on trying.

—Marconi.

One cannot do successfully what he does not perfectly understand. He may have competent employés or trusted attorneys to do his business, but they may do his work imperfectly, or seek their own ease or profit at his expense, and he, not being able to detect their malpractices, must suffer the loss or perhaps fail. Or he may attempt to manage everything himself, commit fatal errors, as he will be almost sure to do, and thereby sustain a still greater loss. "First understand every detail of your business, and then go ahead."

A wealthy farmer said, when asked how he made his money, "Sir, *I understand my business* and attend to it." In that reply is the sum and substance of all true success.

One of the first students of public economy in France in the nineteenth century said that all the difference between a liberal and successful enterprise, and one that was tyrannical and unpromising, lay between the two phrases in the mouth of the master:

"Go to work," and "Come to work."

He said that in farming, at any rate, "Go to work" meant ultimate failure, and "Come to work," with ordinary luck, led securely to fortune.

EDUCATION

There is no element which will enter into our future success more vitally, have greater influence and bearing on our national prosperity, or prove a more obvious safeguard against evils which may naturally arise from a continued flush of success, than perfect and judicious popular education. The more carefully you prepare business men—with whom, in a great measure, the future of the country rests—for the occupations they are to pursue, the more you enlarge their views, moderate their desires, rectify their aims and insure their success.

Stay at school another year or two, and don't be ashamed of what ought to be your glory, that you want to learn more. Step from the district school to the high school, from the high school to the college, if you can. Get a business education by all means—you will never learn too much. If you desire to become a mechanic instead of an engineer or a farmer, an education will not unfit you to become either. It will always be capital bearing a large income of interest.

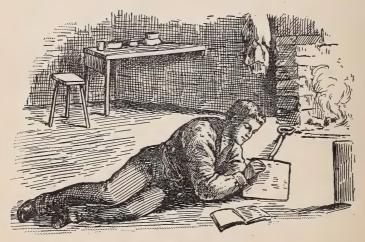
"When home and lands are gone and spent, Then learning is most excellent."

GET INTO THE RIGHT PLACE

How many poor physicians who would have made masterly mechanics; how many wretched merchants, who would have made noble, athletic farmers; how many pettifogging parchment-minded lawyers, who might have done the community some service as cobblers. No wonder the old philosopher said, "God has made in this world two kinds of holes: round holes and three-cornered holes; and also two kinds of people: round people and three-cornered people, but almost all the round people are in the three-cornered holes and the three-cornered people in the round holes." Hence the uneasiness and unhappiness of society and the failure of so many enterprises. Get into the right place, stay there and master your situation, and success is yours. There never was a business in which all failed. There is always room at the top.

WHAT TO DO

Young men, you are the architects of your own fortunes. Rely upon your own strength of body and soul. Take for your star, self-reliance. Don't take too much advice—keep at your helm and steer your own ship, and remember that the great art of commanding is to take a fair share of the work. Think well of yourself. Strike out. Assume your own position. Put potatoes in a cart over a rough road, and the small ones go to the bottom. Rise above the envious and jealous. Fire above the mark you intend to hit. Energy, invincible determination, with a right motive, are the levers that move the world. Be in earnest. Be self-reliant. Be generous. Be civil. Read the papers. Advertise your business. Make money, and do good with it. Love your God and fellowmen. Love truth and virtue. Love your country and obey its laws.



TRAINING FOR GREATNESS

The man who dares to think for himself and act independently does a service to his race.

INDUSTRY AND INTEGRITY

"There is nothing possible to man which industry and integrity will not accomplish. The poor boy of yesterday—so poor that a shilling was a miracle in his vision; houseless and breadless; compelled to wander on foot from village to village, with his bundle on his back, in order to procure labor and the means of subsistence—has become the talented young man of to-day by

the power of his good right arm, and the potent influence of his pure principles, firmly and perpetually maintained. When poverty, and what the world calls disgrace stared him in the face, he shuddered not, but pressed onward. Wealth! what cares he for that, as long as his heart is pure and his walk upright? He knows, and his country knows, and his country tells, that the little finger of an honest and upright young man is worth more than the whole body of an effeminate and dishonest rich man. These are the men who make the country—who bring to it whatever of iron sinew and unfailing spirit it possesses or desires.

"Instead of saying that man is the creature of circumstances, it would be nearer the mark to say that man is the architect of circumstances. It is character which builds an existence out of circumstances. From the same materials one man builds palaces, another hovels; one warehouses, another villas. Bricks and mortar are bricks and mortar until the architect can make them something else. Thus it is that in the same family, in the same circumstances, one man rears a stately edifice, while his brother, vacillating and incompetent, lives forever amid ruins. The block of granite, which was an obstacle on the pathway of the weak, becomes a stepping-stone on the pathway of the strong."

MORAL COURAGE

Have the courage to discharge a debt while you have the money in your pocket.

Have the courage to do without that which you do not need, however much you may admire it.

Have the courage to speak your mind when you should do so, and hold your tongue when it is better you should be silent.

Have the courage to speak to a poor friend in a threadbare coat, even in the street and when a rich one is nigh. The effort is less than many take it to be, and the act is worthy of a king.

Have the courage to set down every penny you spend, and add it up weekly.

Have the courage to admit that you have been in the wrong, and you will remove the fact from the mind of others, putting a desirable impression in the place of an unfavorable one.

Have the courage to face a difficulty. Difficulties, like thieves, often disappear at a glance.

Have the courage to tell a man why you will not lend him

your money; he will respect you more than if you tell him you can't.

Have the courage to cut the most agreeable acquaintance you possess, when he convinces you he lacks principle. "A friend should bear with a friend's infirmities"—not his vices.

Have the courage to wear your old garments till you can afford to pay for new ones.

Have the courage to pass the bottle without filling your glass, and to laugh at those who urge you to the contrary.



JOSEPH W. FOLK.

Have the courage to review your own conduct; to condemn it where you detect faults; to amend it to the best of your ability; to make good resolves for your future guidance, and to keep them.

FRANKLIN'S MAXIMS

- 1. Temperance.—Eat not to dullness; drink not to elevation.
- 2. Silence.—Speak not but what may benefit others or yourself; avoid trifling conversation.
- 3. Order.—Let all things have their places; let each part of your business have its time.
- 4. Resolution.—Resolve to perform what you ought; perform without fail what you resolve.
- 5. Frugality.—Make no expense but to do good to others or yourself; that is, waste nothing.

- 6. Industry.—Lose no time; be always employed at something useful; cut off all unnecessary actions.
- 7. Sincerity.—Use no hurtful deceit; think innocently and justly; and if you speak, speak accordingly.
- 8. Justice.—Wrong none by doing injuries, or omitting the benefits that are your duty.
- 9. Moderation.—Avoid extremes; forbear resenting injuries as much as you think they deserve.
- 10. Cleanliness.—Tolerate no uncleanliness in body, clothes, or habitation.
- 11. Tranquillity.—Be not disturbed at trifles, or at accidents, common or unavoidable.

HABITS OF A BUSINESS MAN

A sacred regard to the principles of justice ought to form the basis of every commercial transaction, and regulate the conduct of the upright man of business

He is strict in keeping his engagements.

He does nothing carelessly or in a hurry.

He employs no person to do for him what he can do for himself.

He keeps everything in its proper place, and does everything at its proper time.

He leaves nothing undone that ought to be done, and which circumstances permit him to do.

He keeps his designs and business from the knowledge of others.

He is prompt, decisive, civil, and obliging to his customers.

He does not overtrade his capital.

He prefers cash to credit, but, if credit is necessary, as short a time as possible.

He prefers small profits and certain returns to large profits and uncertain settlements.

He is clear and explicit in making a bargain.

He leaves nothing of consequence to memory which he can commit to writing.

He will not be above his business.

He keeps copies of all important letters written by him, and carefully preserves all which he receives.

He is methodical in his habits and arrangements.

He is always at the head of his business.

He holds it as an axiom, that he whose credit is doubted should not be trusted.

He constantly examines his books, and sees that they are properly kept.

He makes a balance of the true state of his affairs at regular intervals.

He avoids law suits and accommodation bills.

He is economical in his expenditure, and lives within his income.

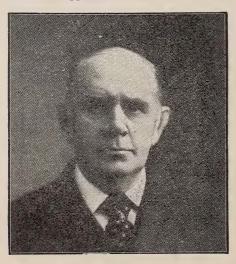
He is cautious in becoming security for any person.

He is generous, but not until he has been just.

Let a man of business conform strictly to these habits; when once formed they are easily retained, and success will result from their practice.

Let him take pleasure in his business, and it will become a recreation to him.

Let him hope for the best, be prepared for the worst, and bear resolutely whatever happens.



MARK HANNA

DILIGENCE IN BUSINESS

Cultivate a spirit of diligence, both in your temporal and spiritual employ. Strictly adhere to your business; religion commands this. There may be difficulties in your calling, and so there are in every situation; but let not this relax your exertions, lest you give occasion for the enemy to speak ill of you. Idleness has led to a thousand evil consequences; while, in itself, it is a most unhappy state of mind to labor under. It is good to be employed. Action is really the life, business, and rest of the soul. "Idleness," as South says, "offers up the soul as a blank to the Devil, for him to write what he will upon it."

CAREFULNESS IN MONEY MATTERS

Punctuality in money matters is one of the greatest sources of comfort and prosperity to the man in business; indeed, to every man. Punctuality in payment may be said to double our means. The man of disorderly habits, with no proper account of income and expenditure, and no just estimate of the relative proportion of his means and obligations, is perpetually exposed to the annoyance and vexation of having demands made upon him, not so much beyond his means as disproportioned to the chance provisions of the moment.

A sensible employé will make his employer's interests his own; and to that end he will endeavor to acquire a thorough knowledge of the details of the business, and do all in his power to honorably advance the interests of the house; for by so doing he will make himself in a great measure indispensable to his employer, which, of course, will undoubtedly have a beneficent effect on his own welfare.

Time is money; therefore devote every moment of it to the attainment of some definite object; and this must be done, if at all, in a methodical manner. If there is any information in this or any other book which you wish to acquire, do not simply read, but study it. Vigor of body begets vigor of mind; therefore take care of your body and keep good hours, and remember that one hour's sleep before midnight is better than two afterwards.

SURETYSHIP

Amongst all other things of the world, take care of thy estate, which thou shalt ever preserve, if thou observe three things: first, that thou know what thou hast; what everything is worth that thou hast; and to see that thou art not wasted by thy servants and officers. The second is, that thou never spend any-

thing before thou have it; for borrowing is the canker and death of every man's estate. The third is, that thou suffer not thyself to be wounded for other men's faults, and scourged for other men's offences, which is the surety for another.

-Sir Walter Raleigh.

PERSEVERANCE

Is the ever ready and kindly ally of those who are seeking success and feel that they do not possess the ability to attain it so quickly as others. The greatest results in life are usually attained by simple means and the exercise of ordinary qualities. The road of human welfare lies along the old highway of steadfast well-doing; and they who are the most persistent, and work in the truest spirit, will usually be the most successful.

IMPORTANCE OF LITTLE THINGS

The Duke of Wellington was a first-rate man of business; and it is not perhaps saying too much to aver that it was in no small degree because of his possession of a business faculty amounting to genius that the Duke never lost a battle. His magnificent business qualities were everywhere felt; and there can be no doubt that, by the care with which he provided for every contingency, and the personal attention which he gave to every detail, he laid the foundations of his great success.

Michael Angelo was one day explaining to a visitor at his studio what he had been doing at a statue since his previous visit. "I have retouched this part—polished that—softened this feature—brought out that muscle—given some expression to this lip, and more energy to that limb." "But these are trifles," remarked the visitor. "It may be so," replied the sculptor, "but recollect that trifles make perfection, and perfection is no trifle."

Attention to details makes a business man, or any other kind of man, "sure that he is right," and then, of course, it only remains for him to "go ahead."

[&]quot;An estate is a pond; trade is a spring."

[&]quot;There is no royal road to riches, and, in a business as big as mine, no back lane."

[&]quot;How much value I place on industry, and how I believe in devoted hard work at the thing once for all accepted as a man's

'calling' in life, may be seen from the fact that even at this stage of my career I generally work from nine in the morning to ten at night."

"My receipt for prosperity, in such a concern as mine, is at the disposal of all. Here it is: "Work hard, deal honestly, be enterprising, exercise careful judgment, advertise freely but judiciously."

"Never despair; keep pushing on,' was my motto during all that time of struggle."

—Sir Thomas Lipton.

MARKS USED IN WRITING AND PRINTING



PUNCTUATION

Punctuation is the use of marks in writing or printing, for indicating the grammatical divisions of sentences.

Some idea of the importance of knowing how to properly punctuate may be gathered from the following:

A Two Million Dollar Comma

It seems that some years ago, when the United States, by Congress, was making a tariff bill, one of the sections enumerated what articles should be admitted free of duty. Among the articles specified were "all foreign fruit plants," etc., meaning plants imported for transplanting, propagation or experiment.

The enrolling clerk, in copying the bill, inserted a comma, accidentally, making it read, "All foreign fruit, plants," etc. As a result of this simple mistake, for a year, or until Congress could remedy the blunder, all the oranges, lemons, bananas, grapes and other foreign fruits were admitted free of duty. This little mistake, which any one would be liable to make, yet could have avoided by carefulness, cost the government not less than \$2,000,000. A pretty costly comma, that.

- 1. The Comma (,) denotes a slight pause and divides a sentence into its component parts. It must be used in sentences which would otherwise be misunderstood.
- 2. The Colon (:) is placed between the chief divisions of a sentence when these are but slightly connected and they are them-

selves divided by some other marks, and is also placed between clauses when the connection is so slight that any one of them might be a distinct sentence.

- 3. The Semi-colon (;) indicates a longer pause than the colon and also divides compound sentences. When a clause especially explains the meaning of some other expression, it is separated from that expression by a semi-colon, and one is used to divide a sentence into sections when the parts are not independent of each other, enough to require a colon.
- 4. The Period (.) denotes the close of a sentence. It is placed after every declarative or imperative sentence.

All abbreviations and initial letters standing alone are followed by a period; used also to separate whole numbers from decimals and after the enumeration of letters or figures.

- 5. The Interrogation Point (?) is used after every sentence or part of a sentence containing a question.
- 6. The Exclamation Point (!) is used to denote wonder, surprise, or astonishment.
- 7. The Dash (—) indicates a sudden change in the subject. One is usually placed before the answer to a question when they both belong to the same line. Often used instead of the parenthesis marks.
- 8. Quotation Marks ("") indicate the words of an author or speaker quoted. Every quoted passage should be enclosed in quotation marks. Quotations consisting of more than one paragraph have the first quotation mark at the beginning of each paragraph, but the second is used only at the close of the last paragraph.

When one quotation includes another, the latter is enclosed by only one of each of the first and last marks, (' ').

- 9. The Parenthesis () is used to enclose an explanatory remark, which might be omitted without injuring the grammatical construction of the sentence.
- 10. The Hyphen (-) is used to connect the syllables or parts of a compound word, and to connect a word broken at the end of a line, when the remainder follows on the next line.
- 11. The Caret (\land) denotes that some word or letter has been omitted by mistake; as,

 $\begin{array}{c} \text{going} \\ \text{I am}_{\,\,\wedge} \text{to New York.} \end{array}$

12. Brackets [] are used chiefly to give an explanation, or to

supply an omission; as, Yours [the United States] is a great country.

- 13. The Apostrophe (') placed between letters and above them in a word denotes a contraction; also used before or after the letter 's to denote the possessive case; as, O'er, John's book, James' house.
- 14. The Stars (***) or N. B. are used to invite special attention.
 - 15. The Brace { connects several words with one common form.
 - 16. The Paragraph (¶) begins a new subject.
 - 17. The Section (§) is used to subdivide chapters.
- 18. The Asterisk (*), Parallels (\parallel), Dagger (\dagger), Double Dagger (\ddagger) are used as reference marks.
- 19. The Commercial A (@) used in market quotations, means "at" or 'to."
 - 20. The Sign "#" means per, and "fb" means pound.
- 21. The Ellipsis (* * *) or (——) denotes the omission of letters or words.
- 22. The Index () points to something of special importance.
- 23. Underscore (———) is a line or lines drawn under words in writing that is intended for printing. One line denotes italics; two lines, small capitals, and three lines, large capitals.

SPELLING

Very few rules for spelling can be given to which exceptions are not so numerous as to render the rule of little value, but the following are a few of the more general:

Words ending in e drop that letter before the termination able, as in move, movable; unless ending in ce or ge, when it is retained, as in change, changeable, etc.

Words of one syllable, ending in a consonant, with a single vowel before it, double that consonant in derivatives; as ship, shipping, etc. But if ending in a consonant with a double vowel before it, they do not double the consonant in derivatives, as troop, trooper, etc.

Words of more than one syllable, ending in a consonant preceded by a single vowel, and accented on the last syllable, double that consonant in derivatives, as commit, committed, but except chagrin, chagrined. All words of one syllable ending in *l*, with a single vowel before it, have *ll* at the close, as mill, sell.

All words of one syllable ending in l, with a double vowel before it, have only one l at the close, as mail, sail.

The words foretell, distill, instill and fulfill, retain the double l of their primitives. Derivatives of dull, skill, will, and full, also retain the ll when the accent falls on these words, as dullness, skillful, willful, fullness.

Words of more than one syllable ending in l have only one l at the close, as delightful, faithful, unless the accent falls on the last syllable, as in befall, etc.

Words ending in l, double that letter in the termination ly.

Participles ending in *ing*, from verbs ending in *e*, lose the final *e*, as have, having; make, making, etc.; but verbs ending in *ee* retain both, as see, seeing. The word dye, to color, however, must retain the *e* befor *ing*.

Words ending in oe retain the final e, as shoe, shoeing; hoe, hoeing.

All verbs ending in ly, and nouns ending in ment, retain the e final of the primitives, as brave, bravely; refine, refinement; except words ending in dge, as acknowledge, acknowledgment.

Nouns ending in y, preceded by a vowel, form their plural by adding s, as money, moneys; but if y is preceded by a consonant, it is changed to ies in the plural, as bounty, bounties.

Compound words whose primitives end in y, change the y into i, as beauty, beautiful.

RULES FOR THE USE OF CAPITALS

A very common fault is the improper use or omission of capital letters. Persons liable to make such mistakes should study attentively the rules given below on the subject and then carefully apply them.

Most words commence with small letters. Capitals must be used only when required by the following rules:

The first word of every sentence and the first word of every line of poetry should begin with a capital letter.

All proper names should begin with capital letters.

Words derived from proper names begin with a capital.

Every word that denotes the Deity should begin with a capital. Pronouns relating to the Deity should generally commence with a capital.

The months of the year and the days of the week begin with capitals.

The words north, south, east, west, and their compounds and abbreviations, as North-West, commence with capitals when they denote a section of country.

The pronoun I, and the interjection O, are always capitals. Every direct quotation should begin with a capital letter.

All titles of persons begin with capitals.

All the principal words in the titles of books should begin with capital letters.

The several chapters or other divisions of any book begin with capitals.

Common nouns personified begin with capital letters.

Any word particularly important may begin with a capital letter.

All words denoting religious denominations begin with capital letters.

In all kinds of advertisements nearly all the leading words usually begin with capitals.

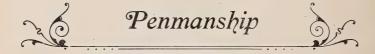
In accounts each article mentioned should begin with a capital.

A Hard Word

Perseverance! Can you spell it?
And its meaning, can you tell it?
If you stick to what you're doing,
Study, work, or play pursuing,
Every failure bravely meeting,
Bravely each attempt repeating,
Trying twice, and thrice and four times,
Yes, a hundred, even more times,
You can spell it! You can spell it!
And its meaning, you can tell it!



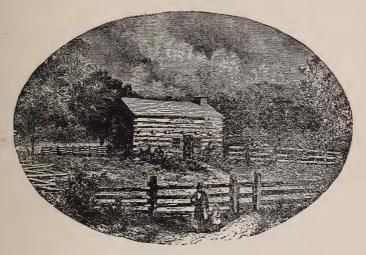
PLATT ROGERS SPENCER, the famous author of the Spencerian penmanship, whose beautiful system revolutionized the crude methods of chirography once in vogue.



It is a lamentable fact that perhaps no part of the education of the youth of America in our public schools is so sadly neglected as their penmanship, not because it is least important, but because so few teachers have acquired a good hand themselves or know how to impart correct principles of writing.

Its Importance.—To be able to write a good business hand often means the opening of doors of opportunity that would otherwise be closed, to young people desirous of making progress in the business world.

Offtimes a letter is all the recommendation a young man has in applying for a position, and if it be poorly written his chances of being accepted are usually correspondingly poor. At the same time our friends and all with whom we may have occasion to correspond judge us more or less by the style of our writing.



P. R. SPENCER'S LOG SEMINARY, JERICHO, N. Y.

Penmanship not a Gift.—While it is easier for some than for others to acquire a good hand-writing, it is by no means a gift. Penmen, like poets, are born, but penmanship, like the ability to walk, is an after accomplishment which all may acquire if they begin in time and on right principles.

If you are willing to pay the price you may become a good writer. A little time each day for a few months devoted to intelligent practice will bring results that will astonish the poorest scrawler.

How to Begin.—Procure a plentiful supply of good foolscap paper, penholder with cork grip, pens of medium or fine points and good black ink. Don't get cheap material.

Position at Desk.—Sit squarely in front of desk, or table low enough to allow your arm to rest comfortably on it without throwing your shoulder up. Keep your feet on the floor in front of you—not crossed or twisted around the chair legs—and the muscle of the right forearm resting on the table or desk, the left hand on the paper in front of the pen. Sit up straight and do not allow yourself to get into a cramped position.



FIGURE No. 1

Hold the Pen firmly but not too tightly, so that it points over your right shoulder, allowing the weight of the hand to rest on the nails of the little and third fingers, keeping the wrist flat with the paper. It should not touch it, however. Figures No. 1 and 2 will illustrate better than words the correct position and how to hold the pen.

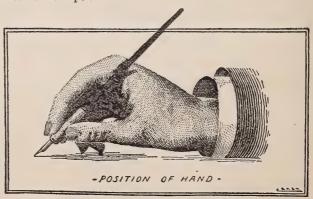


FIGURE No. 2

Ready to Begin.—You are going to write with the muscle of the forearm, not with your fingers.

Lay down your pen and move your arm back and forth on the muscle, as shown in Fig. No. 3.



FIGURE No. 3

When you get the correct idea, take up your pen and practice Exercises Nos. 1 and 2 until you develop a free and easy movement, after which you may begin on Exercise No. 3, running through all the letters of the alphabet in the same manner.

In practising Exercise No. 3 space between your letters so that you have not more than five letters across a page of foolscap.

You will find you have not much control of your pen at first. Do not allow that to worry you. When you have developed a good movement by the practice of Exercises Nos. 1 and 2, then pay more attention to form.

Never practice carelessly. Your mind must be concentrated upon your work. Never lean against the desk.

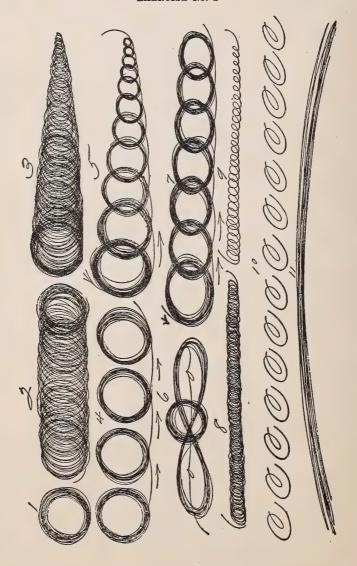
Be enthusiastic and confident you are going to master your task.

A good business hand consists of plain, legible writing, without the use of flourishes or shading, written in a rapid, easy manner.

The following pages will afford copy for more advanced practice.



EXERCISE No. 1



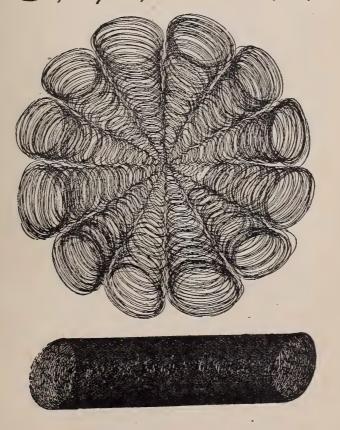
EXERCISE No. 2

Practiced with Direct of Reversed Motions. - Large of Small

EXERCISE No. 3

FIGURES AND MOVEMENT EXERCISES

1234567890 1234567890 1234567890 1234567890 \$ @ of of afc 1234567890



BUSINESS CAPITALS

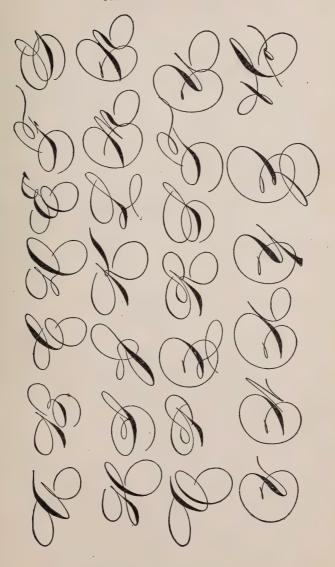
BUSINESS WRITING

BUSINESS WRITING

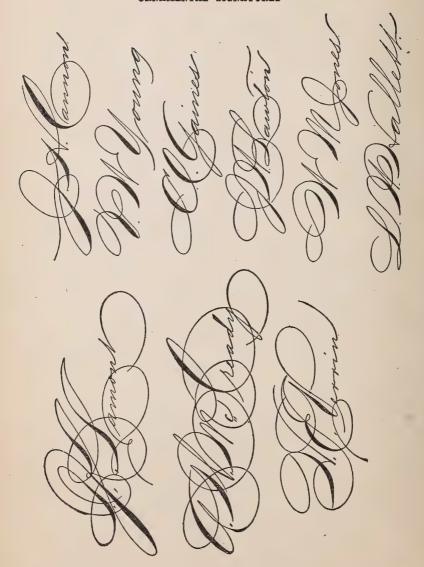
BUSINESS SIGNATURES

PENMANSHIP

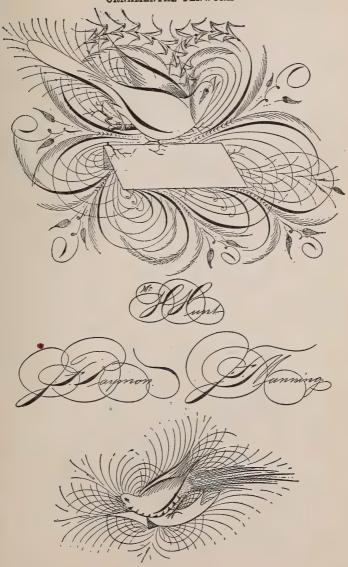
ORNAMENTAL CAPITALS

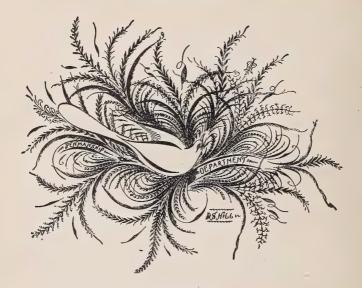


ORNAMENTAL SIGNATURES

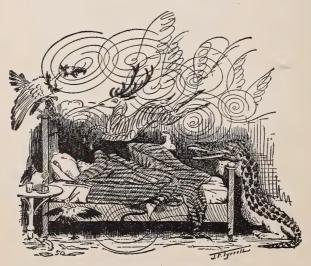


ORNAMENTAL PENWORK



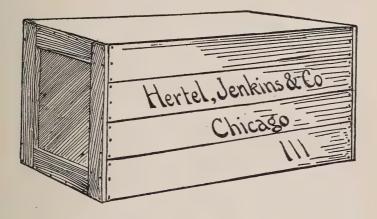


PEN DRAWING



THE FLOURISHER'S NIGHTMARE

MARKING CARDS, PACKAGES, BOXES, ETC.



We present herewith a few principles giving main slant and strokes which go to make up capitals and small letters.

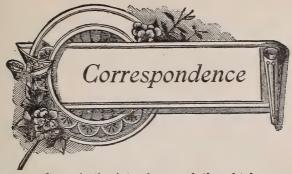
Use foolscap paper, any good black ink, and an elastic pen. For brush or actual box marking, 15 cents' worth of asphaltum, thinned with turpentine to a desired consistency, will give you sufficient paint to stripe a country town. For accurate lettering, — inch round, camel's hair brush, or No. 3 marking brush for rough surfaces. Any wrapping paper will serve well for practice work.



ALPHABET FOR MARKING BOXES, ETC.

Marking Alphabet.

abenk FG MedNGIH NOPQRST LAM KAL abedefahijk lmnopqrst unmany.



Correspondence is the interchange of thought by means of letters.

A large per cent of the world's business is transacted by correspondence, and in these days of rapid transit and cheap transportation friends and relatives become widely scattered and their only means of keeping in touch with one another is through letter writing.

To be able to write a good letter is therefore not only an accomplishment but an important necessity.

It is the opinion of competent judges that a man's habits and qualities as a business man may be fairly estimated from familiarity with his business letters, and his social correspondence is likewise an index to the trend of his thought, and his general character. It is safe to say that the majority do not appreciate the value of the ability to write a good letter.

First in Importance.—Perhaps the matter of first importance in a letter is the expression of the proper ideas in the proper language.

Next to That an easy, graceful style of writing, with words correctly spelled, and sentences properly punctuated. Improper punctuation often renders the meaning unintelligible or the opposite of what was intended altogether.

Classes of Letters.—Letters are usually divided into two general classes: Social and Business.

Social Letters are those that grow out of social and personal relations: as, letters of affection, friendship, congratulation, sympathy, introduction, condolence, etc.

Business Letters, as the term implies, are such as are written regarding matters of business of whatever kind.

BUSINESS CORRESPONDENCE

The Materials.—Good pen, ink and paper. For business correspondence three styles of paper are in general use, viz.: commercial note, about 5x8 inches; packet note, about 5\frac{1}{2}x8\frac{3}{4} inches, and letter paper, which is usually about 8½ x 11 to 13 inches. The smaller sizes for short letters and the larger for long ones.

The envelopes most commonly used are Nos. 6 and 6½.

Parts of a Letter.—For convenience in explaining the form of a letter we call the different parts by the following names:

- 1. Heading (Place and Date). 4. Body of Letter.
- 2. Address.
- 5. Complimentary Closing. 3. Salutation. 6. The Writer's Signature.
- The following diagram will show clearly their position:

Diagram of the Parts of Letters.

	,	TIPA DINO
		HEADING
	. *************************************	ADDRESS
		SALUTATION BODY OF LETTER
<u>e</u>		
i i	***************************************	
MARGINAL LINE	LINE	
RGIN	A	,
MAI	₩.	
	A P I	BODY OF LETTER
	GR	
	PARA GRAP H	
	PA	
		•
	######################################	
		COMPLIMENTARY CLOSING
		SIGNATURE

Heading.—The heading indicates where and when the letter was written and should contain information the person written to will need in directing his reply. It should be written to the right hand side of the sheet and about two or two and one-half inches from the top. There is no objection to using two or more lines for the heading if required.

The Address of a letter consists of the name and title of the person or firm to whom you are writing, the residence, or place of business, as the case may be, to which the letter is to be sent.

The inside address, as this may be called, will be the same as the address on the envelope, excepting that on the inside address the city and state may be written on the same line. Begin the address on the left-hand side of the sheet, one inch from the edge of the paper, and on the line following the one on which the heading is written. The second line of the address should begin an inch farther to the right than where the first line is begun.

The Proper Use of Titles.—Two titles of courtesy should not be joined to the same name: as, Mr. John Hartley, Esq; nor should a title of courtesy be used with a professional or official title: as, Mr. J. B. Wilson, M.D., or Hon. Henry Weston, Esq. One exception to this rule, however, is permitted where a clergyman's initials or first name is not known, to write, Rev. Mr. (——), giving only the surname.

The Salutation is the complimentary term used to begin the letter. The forms most in use are Sir; Dear Sir or My Dear Sir. In addressing a firm, Sirs, Dear Sirs, Gentlemen, or My Dear Sirs. If the person addressed be a lady, Madam, or Dear Madam. If she be a young, unmarried lady, Dear Miss, or it is quite correct to omit the salutation where doubt exists as to whether she be married or not, or if the writer has no acquaintance with her.

Follow the salutation with a comma and dash, and never write Gents for Gentlemen, or Dr for Dear, etc.

The Position of the Salutation depends somewhat upon the number of lines in the address. The examples on next page will illustrate this and the form of letters in general.

The Body of the Letter is that part which contains the message or information to be imparted. In this, good form, penmanship, spacing and paragraphing should receive due care.

The body of a business letter should begin on the same line, following the salutation.

PARTS OF A LETTER

The Complimentary Closing follows the body of the letter, on the line below the last line of the letter, and consists of the words of respect or regard used to express the writer's feelings toward the person written to. They are in a sense conventional and are often used without thought as to their meaning. The most common forms in business use are: "Respectfully," "Respectfully yours," "Yours very respectfully," "Yours truly," "Yours very truly," "Yours faithfully," "Sincerely yours," etc. "Gratefully yours" may be used if the writer is under obligation to the one written to, or "Fraternally yours" if a member of the same order or society.

In official letters a more formal style is used: as, "I have the honor to be, Yours very respectfully."

The complimentary closing should always be consistent with the salutation. For example: to begin a letter with a formal "Sir" and close with "Sincerely yours" would show very bad taste.

Yours truly,

Dinny Joines & Ca,

Respectfully,

Jours respectfully,

Toster, Manning & Co.

Jam.

Yours very respectfully,

The Signature is the name of the writer or the firm or company he represents. It should be written under the complimentary closing and should end just at the right-hand edge of the sheet.

It should be written very plainly. Many writers have a habit of making their signature the most unintelligible part of their letters, presuming that because their name is familiar to themselves it is to everybody else.

A lady writing to persons with whom she is not acquainted should always prefix the title, *Miss* or *Mrs.*, in parenthesis, to her signature.

Folding.—The letter sheet should be folded so as to nearly fill the envelope. To fold a sheet of letter paper to fit the No. 6 or 6½ envelope, turn the bottom of the sheet up to the top, making one fold, then fold equally from the right and from the left, making the letter, when folded, a little narrower than the envelope. If the envelope is held with the left hand, back up, and the letter inserted as folded, all the receiver has to do when he opens the envelope is to withdraw the letter and turn back the folds, and he has it before him right side up. This is important.

Sealing.—Be particular to seal your letter properly, especially if it contains money or other enclosure.

A letter of introduction or recommendation should never be sealed when entrusted to bearer.

The Envelope Address.—The name and title should be written on the center of the envelope lengthwise. When street and number are given, or the direction "In care of Mr.—" they follow on the second line, the city or town on the third, and the state on the fourth or lower right-hand corner of envelope.

The envelope should be placed before the writer with the flap farthest from him, otherwise it will be addressed upside down; and the letter should not be inserted until after the address is written.

More than five million letters and packages reach the dead letter office at Washington every year because they are improperly directed, therefore great care should be exercised in addressing envelopes.

See examples of addressed envelopes.

The envelope used for business purposes should have either written or printed upon its upper left-hand corner the name and address of the sender, with the request to be returned in a certain number of days if not called for.

ADDRESSED ENVELOPES

If not called for in 10 days return to HERTEL, JENKINS & CO. PUBLISHERS, CHICAGO, ILL William Hart, Esq., 398 Grove Ave, Distroit, Mich:
Messes Barton & Millis, Truesdale, Lincoln Co., Col.
The Morning Herald, Sennington, Box 493.

Opening Letters.—Letters are properly opened by inserting a knife or other convenient instrument under the flap at the end and cutting across the top of the envelope.

SOME SPECIAL POINTS IN BUSINESS LETTERS.

- 1. Be brief and to the point without being blunt or offensive.
- 2. Be courteous in your requests and polite in your demands.
- 3. Never write a letter with a lead pencil; always use pen and ink.
 - 4 Avoid the use of flourishes.
 - 5. Blots and errors due to slovenliness are inexcusable.
 - 6. Avoid interlining; rather rewrite your letter.
 - 7. Aim to write as legibly as you know how.
- 8. Never discuss or refer to matters of a social nature in a business letter.
 - 9. Never write a letter when angry or vexed.
 - 10. Write on one side of the sheet only.
- 11. When requesting information always enclose stamp for reply.
- 12. If your letter contains money or an enclosure always state the amount, or what the enclosure is.
- 13. Take a copy of all letters containing matters of importance. It may save you trouble.
- 14. Be prompt in acknowledging the receipt of a business letter, mentioning its date
- 15. Never write an anonymous letter; it is the coward's weapon.
- 16. See that your letters are divided into paragraphs and properly punctuated.
- 17. Write as though your correspondent was at your side and you were talking to him
- 18. Letters ordering goods should state plainly the articles wanted, giving full directions for shipping, and the name and address of the person ordering.
- 19 Money should be remitted by draft, P.O. order, express order or registered letter.
- 20. Money orders or other enclosures should be folded in the letter; not put in the envelope separately.
- 21. Do not use figures in the body of a letter, except to denote sums of money, dates, street or P.O. box numbers.
 - 22. Do not forget to sign your name.

- 23. &c means "and so on in the same manner." Etc. is entirely different and means "and other things." Use them only in their correct sense.
- 24. In requesting payment of money due you, avoid being offensive. Remember, it is better to have a person a friend, than an enemy.
- 25. Do not mix up an order for goods in the body of a letter. Either use a separate sheet, or make it a separate part of your letter with only one style or kind of goods on a line.
- 26. Use care and neatness in addressing your envelope, and if writing a number of letters be sure that John Smith's letter does not go in Tom Brown's envelope.
- 27. Never write a dun, or any matter of importance, on a postal card. To make a threat of any kind on a postal card renders it unmailable, and to use indecent language thereon is a criminal offense, under the laws of the United States.
- 28 A prompt acknowledgment of the receipt of an order for goods is a commendable practice.
 - 29. Avoid abbreviations and the use of postscripts.
- 30. Never write a threatening letter; in most of the States it is made a criminal offense by statute.

RULES FOR WRITING A POSTAL.

- 1. A card should be dated either on the upper right-hand corner, or on the lower left-hand corner.
 - 2. Always sign your name in full.
- 3. If you wish an answer, give your full postoffice address, unless it is well known by the person to whom you are writing.
- 4. Never write a demand or a request for money on a postal card. It is disrespectful to the person receiving it.
- 5. Never write an invitation on a postal. Society prescribes polite forms for this purpose
- 6. Do not trust important matters to a postal card, for it is open to inspection, and the law does not provide for its return to the writer if it fails to reach its destination.



EXAMPLES OF BUSINESS LETTERS

Letter Containing a Remittance

Canton, Ohio, Feb. 10, 1904.

Messis. Williamson & Caton

Williamsport, Pa.

Gentlemen:—Enclosed please find N. Y. Draft for Sixty-five Dollars (\$65.00), in settlement of your invoice of January 12th, which you will kindly receipt and return. Yours truly,

PETER SCHRADER.

Letter Acknowledging Above

Williamsport, Pa., Feb. 12, 1904.

Mr. PETER SCHRADER.

Canton, Ohio.

Dear Sir:—Yours of the 10th inst., containing N. Y. Draft for Sixty-five Dollars (\$65.00), came to hand this morning.

We enclose bill properly receipted, and wish to thank you for prompt settlement of your account.

Yours respectfully,

WILLIAMSON & CATON.

Letter Ordering Goods

120 Penn St., Scranton, Pa., May 1, 1904.

Messrs. Geo. M. Hill & Co.,

110 W. Jackson Blvd.,

Chicago, Ill.

Gentlemen:—Please ship by freight over the Penn. Line the following books:

50 Copies Handy Encyclopedia, Cloth Binding

10 Copies Handy Encyclopedia, Half-Morocco Binding

27 Copies The Business Educator, Cloth Binding

13 Copies The Business Educator, Morocco Binding

10 Copies Bible Symbols, Cloth Binding

Enclosed you will find P. O. money order for Fifty-Seven Dollars (\$57.00) in payment of above. Kindly ship as promptly as possible, and oblige,
Yours for success,

EDWIN LEWIS, Agent.

Calling Attention to Error in Invoice

Hamilton, Ohio, Jan. 27, 1904.

Messrs. Davis & Holt, Cincinnati, Ohio.

Gentlemen:—I find in checking your invoice dated the 10th inst. for shipment of biscuits that you have overcharged me 15 cents per box on the plain sodas. I herewith return said invoice and ask you to kindly send me a corrected one.

Respectfully,

JAS. DOYLE.

Letter Acknowledging Order for Goods

110 W. Jackson Blvd., Chicago, Ill., May 3, 1904.

Mr. EDWIN LEWIS,

Scranton, Pa.

Dear Sir:—Your letter of the 1st inst., containing Fifty-seven Dollars (\$57.00) and order for books, has been received.

We are shipping your books via Penn. freight as ordered, and trust they will reach you without any unnecessary delay. Bill of lading will be mailed you to-morrow.

Thanking you for the above order, and wishing you the best of success, we are,

Yours very truly,

GEO. M. HILL & Co.

Letter Inclosing Corrected Invoice

Cincinnati, Ohio, Jan. 30, 1904.

Mr. JAS. DOYLE.

Hamilton, Ohio.

Dear Sir:—Your favor of the 27th inst. is at hand, and in reply, we desire to apologize for our error, and herewith enclose you corrected invoice.

Yours truly.

DAVIS & HOLT.

Per D.

Letter Requesting a Loan

Denver, Colo., May 1, 1904.

Mr. FRANK SMITH,

Colorado Springs, Colo.

Dear Sir:—Much as I dislike the idea of asking any one to be inconvenienced by my circumstances, I am obliged to borrow Twenty-five Dollars until the first of June, and I take the liberty, knowing your confidence in me and your generosity, to ask if you can accommodate me with a loan.

I am sorry to trouble you, but hope you will pardon me if I have trespassed on your kindness.

Believe me,

Gratefully yours,
John Longley.

Giving Notice of Note Coming Due

Burlington, Iowa, 3/10/04.

Mr. D. E. HOLTZ.

Des Moines, Iowa.

Dear Sir:—Your note for Fifty Dollars (\$50.00), dated Sept. 30, 1903, at six months, and made in our favor, will be due and payable at the State National Bank on the 30th inst.

Kindly provide for same, and oblige,

Yours truly.

KERR & KECK.

Letter Enclosing Note for Collection

Louisville, Ky., April 5, 1904.

FARMERS' AND MERCHANTS' BANK, Joplin, Mo.

Gentlemen:—We enclose a note for Sixty-five Dollars (\$65.00), drawn by J. K. Watson of your town, and due the 30th of this month.

Kindly collect the amount of same, together with six months' interest due, and remit the proceeds to us in Chicago or N. Y. exchange.

Thanking you in advance, we are,

Yours truly,
RILEY & RIDNOUR.

Letter Enclosing Bill of Lading to Bank for Collection

Moline, Miss., April 8, 1904.

FIRST NATIONAL BANK,

Syracuse, N. Y.

Dear Sirs:—We enclose herewith bill of lading to our name endorsed in favor of Mr. John Marten, 10 Beaver St., your city.

Kindly deliver said bill of lading to Mr. Marten upon payment of Forty Dollars (\$40.00) and the cost of remitting the amount to us in N. Y. exchange. Thanking you for your kind attention to the above, we are.

Yours truly, OXFORD PUB. Co.

Letter of Resignation

Streator, Ill., May 1, '04.

Messis. Hoffman Mfg. Co.,

City.

Gentlemen:—Having decided to go into business for myself, I am therefore obliged to resign my position and ask to be relieved from my duties the first of June next.

Permit me to say that it is with feelings of regret that I sever my connection with associations that have always been of the most pleasant character.

Yours very respectfully.

GEO. W. HARDING.

Letter Advising Shipment on Commission

Grand Haven, Mich., Aug. 25, 1903.

Messrs. HILL & LERNE,

Commission Merchants,

Chicago, Ill.

Gentlemen:—As per our previous arrangements, I am shipping you to night via Steamer Conger, on consignment,

500 baskets of choice peaches.

Kindly take care of same and dispose of them at the best price obtainable and place the proceeds to the credit of my account. Yours truly,

J. B. GREGG. (Shipper)

Letter Giving Notice of Traveler's Call

(Printed Letterhead.)

Jan. 10 1904.

Messrs. Kingman, Brown & Co.

Boston, Mass.

Gentlemen:—Our representative, Mr. A. K. Parks, expects to call upon you about the first of February with a full line of samples of the latest and best in knitted goods.

We trust you will defer placing your order until you see what we have to offer, as we believe we have exceptional values for the trade this year.

Thanking you for your many past favors, we are,

Respectfully yours,

KENZIE KNITTING MILLS.

J. D. K.

An Order on a Business House for Goods

Troy, N. Y. May 2, 1904.

Messrs. ARTHUR & COMRIE,

City.

Gentlemen:—Please deliver to the bearer, Mr. Chas Wright, goods that he may select, not exceeding in value Fifty Dollars (\$50.00), which you may charge to our account and mail us invoice for same.

Your kind attention will oblige.

Yours truly,

SCOTT & CO.

Letter Complaining of Shortage in Goods

Fresno, Cal., May 10, 1904.

Messrs. Harrison Weir & Co.,

59 Lake St., Chicago, Ill.

Gentlemen:—Your shipment of Gold Soap, which left Chicago on the 3rd of April, reached us to-day, and we find same to be ten boxes short.

We return you herewith freight receipt, which does not correspond to the bill of lading or your invoice, and ask you to kindly investigate the cause of the shortage.

Yours very truly,

PETERSON BROS.

Per J. D. P.

Letter Giving Notice of Dissolution of Partnership

Mendota, Ill., April 9, 1904.

We hereby give notice that the partnership heretofore existing and doing business under the firm name of Shaw & Bentley has been this ninth day of April, 1904, dissolved by mutual consent, and Mr. Shaw appointed to collect all outstanding debts and settle all accounts of said firm.

JAS. D. SHAW. C. R. BENTLEY.

The above notice may be either published or addressed to individuals interested in the change.

Letter Complaining of the Non-Arrival of Goods

Toronto, Can., 3/8/04.

Messrs. Allen & Lee,

Detroit, Mich.

Gentlemen:—The shipment of Art Goods which you made to us the 15th of last month has not yet arrived. We have been advised by the Customs Department that they are being held for invoice.

Kindly mail copy of Certified Invoice to the Department at Windsor,

and urge them to pass the goods at once, obliging,

Yours truly.

ROBERTS & Co.

Requesting Address of Paper Changed

Concord, N. H., May 2, 1904.

Messis. Herald Pub. Co.,

Boston, Mass.

Gentlemen:—Will you please change the address of my "Herald" from J. K. Good, 79 Palace St., to J. K. Good, 94 York St., Concord, N. H., and oblige?

Yours truly,

J. K. Good.

LETTERS REQUESTING SPECIAL FAVORS

A letter making a request of any kind should approach the subject in a direct manner. The nature of the request should be stated at the beginning, and any explanation necessary for making the request should follow, and be brief and to the point.

If necessary to ask for a remittance on an account not yet due, for the privilege of drawing on a prompt paying customer, or for an extension of time on an account or note, special care should be used in wording the request.

The following will serve as examples:

Bellevue, Mich., April 15, 1904.

Messrs. Kingman & Son, Detroit, Mich.

Gentlemen:—For some time past our business has been tied up to such an extent, on account of circumstances over which we have no control, that we are obliged to ask you if you can favor us with a remittance covering one-half your account. We will be glad to extend the time for the payment of the balance to the 15th of Sept. provided you can accommodate us with your

check by the 20th inst.

We anticipate a speedy adjustment of our difficulties, and hope this will be the only time we will be under the necessity of calling on you for your account before due.

Kindly wire your reply at our expense. Thanking you in advance, we are, Respectfully yours,

HENRY MORGAN & Co.

Asking Note Extended

Red Oak, Iowa, Jan. 10, 1904.

PERRY, HARTMAN & Co.

Des Moines, Iowa.

Dear Sirs:—We find that we will be unable to meet our note for Two Hundred Dollars (\$200.00), due the first of February, and write to enquire if you will kindly extend the time of payment to the first of March. By that time we will be able to meet principal and interest in full.

We are sorry to have to ask this, and if not convenient for you, kindly notify us by return mail so that we may make other arrangements. We trust, however, you can accommodate us, and desire to thank you in advance for the favor.

Yours very respectfully,

James Dennis & Co.

LETTERS OF INTRODUCTION

Letters of Introduction may be either of a social or business nature. The fact that a letter is given is usually considered as an indorsement of the bearer, therefore, in introducing a business acquaintance care should be exercised that the person introduced be one you can safely recommend, and your letter worded so that you will not be obligating yourself further than you intend.

Letters of introduction should not be sealed, as the person introduced has a right to know what the letter contains.

The following will serve as an example:

Dixon, Ill., April 7, 1904.

Mr. J. B. KENNEDY,

15 Spruce St., Louisville, Ky.

Dear Sir:—This will introduce to you my friend, Mr. Harold Rogers, who represents the Gibson Manufacturing Company of Chicago, engine builders, who desire to open a branch office in your city.

Any assistance you may be able to give Mr. Rogers in securing a suitable location will be greatly appreciated by me.

Yours very respectfully, Wm. Sears.

Besides the address of the person or firm to whom the letter is addressed, the envelope should have on the lower left-hand corner the following: Introducing Mr. Harold Rogers.

Letters of Indorsement

A letter introducing a business acquaintance for the purpose of opening business relations between him and the persons to whom he is introduced is called a letter of *indorsement*. If the person asking such a letter is known to be financially responsible and of good character and business ability, little risk

is assumed; but unless he is known to possess these qualities the letter better not be given.

Letters of indorsement should not be sealed if delivered to the person requesting them.

The following is a safe form:

Muskegon, Mich., May 1, 1904.

Messrs. Edison Electric Co., Kalamazoo, Mich.

Gentlemen:—The bearer, Mr. Robt. West, is preparing to engage in business in Grand Rapids, Mich., and calls on you for the purpose of examining your goods.

Nine years' acquaintance with Mr. West justifies us in stating that he is a gentleman of sterling qualities and business ability, and knowing the field in which he is about to locate, we have no hesitation in saying that you will find it profitable to extend to him every courtesy.

Very truly yours,

ROBT. WALTON & SON.

Letter Incurring Direct Liability

110 Lincoln St.,

Rockford, Ill., 3/8/04.

Messrs. Jas. Ray & Co.,

90 State St., Chicago, Ill.

Gentlemen:—This will introduce Mr. R. E. Higgins of our city, who wishes to purchase goods on thirty days' time.

We have known Mr. Higgins for the past fifteen years, and confidently state that he is good for whatever contracts he may make.

You may consider this letter indorsement to the extent of One Thousand Dollars. Respectfully yours,

COLE & MCKENZIE.

LETTERS OF RECOMMENDATION.

In giving a letter of recommendation it should always be borne in mind by the writer, that in recommending another, three persons are liable to be affected by it.

If not carefully worded the applicant might be entrusted with duties or responsibilities on the strength of such a letter, that he is totally unfit for, and consequently the employer would suffer loss and be put to inconvenience, the applicant instead of being benefited would be disgraced, and the writer's reputation for good judgment and truthfulness be injured.

If the applicant merits commendation it should never be withheld; but the letter should never overdraw or state more than he is capable of fulfilling.

The letter may be addressed to the person or firm to whom the bearer desires to make application; or it may be written without address, or "To whom it may concern." In either of the latter ways it may then be presented to any one the bearer chooses.

The following are some of the usual forms:

Utica, N. Y., Jan. 26, 1904.

Messts. J. Peterson & Co.,

Hillsboro, Iowa.

Gentlemen:—We take pleasure in stating that Mr. Will Cameron, who has been in our employ for the past three years, as clerk, has by the faithful performance of his work and his manly, upright character, won for himself the respect and confidence of every one connected with our establishment.

We regret that failing health compels him to seek outside employment, and we heartily recommend him as a trustworthy, capable and energetic salesman. Yours very respectfully,

KENNETH STEVENS CO.

An Open Letter of Recommendation

Atlanta, Ga., April 20, 1904.

TO WHOM IT MAY CONCERN:-

This is to certify that the bearer, Mr. George J. Bailey, has been in the employ of our company for the past two years, as bookkeeper, and that he has proven himself to be capable, energetic and faithful, a young man of good habits, and fine Christian character, and we heartily recommend him to anyone desiring the services of a competent bookkeeper.

He leaves us to better his position, and carries with him our best wishes for his success.

Respectfully.

CARTER Co.

Per J. C. Carter, Prest.

29 Woodward Ave.,

Cleveland, Ohio, March 10, '04,

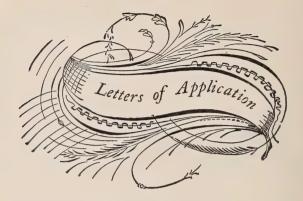
* The bearer, Miss Jennie Comrie, has been superintendent of the millinery department of our dry goods house for several years, and we take pleasure in stating that her services have been very satisfactory, and we would be glad to retain her at an advanced salary, but she has decided to go west.

We cheerfully recommend her as being a lady of exceptionally good judgment in her line of work and capable of holding the best class of trade.

Jones & Benedict.

JONES & DENEDICT.





A Letter of Application should be the best specimen of letter the writer can produce, both as to the penmanship and composition. Remember the experienced eye of the business man will readily detect the errors, if any, and not only that, he forms an estimate of your qualities by the letter you write.

The following suggestions may be helpful:

- 1. Write your letter of application yourself and do not apply for a position you doubt your own ability to fill.
- 2. Write respectfully, and modestly, frankly stating your qualifications, without boasting.
- 3. Be sure the form of your letter, the grammar, punctuation, spelling, and use of capitals are correct.
- 4. Let the writing be neat, the letter free from blots and erasures, even if you have to rewrite it half a dozen times.
- 5. If making a personal application, and you are asked to write your letter then and there, be prepared. Keep your thoughts collected and put these suggestions into practice.
- 6. Replying to an advertisement, state when and where the advertisement was seen. Make application for the position advertised, and answer all the requirements.

Salesman's Application

La Grange, Ill., April 10, 1904.

Messrs. Armour & Co., Chicago, Ill.

Gentlemen:—Replying to your advertisement in Saturday's "Record-Herald" for a city salesman. I respectfully apply for the position you offer. I nave had three years' experience as salesman for a line of goods selling to

grocers and butchers, and know the city and the trade thoroughly. All I ask is an opportunity to prove my ability to sell goods.

I respectfully refer you to J. H. Boony & Co., 10 S. Water St., Chicago,

or John D. Mills, 169 Market St., Chicago.

I shall be glad to call on you for a personal interview.

Yours very truly,

L. A. FOSTER.

Application for Position as Clerk

Springfield, Ill., May 1, 1904.

MARSHALL & DUNNE,

Glencoe, Ill.

Gentlemen:—Learning through a friend of mine that your business is increasing to such an extent that you require the services of another clerk, I hereby respectfully apply for the position. If I am accepted I will faithfully serve you to the best of my ability, and your interests will be my first consideration.

I shall be glad to furnish testimonials as to my character, ability, etc. Hoping to hear from you favorably, I am,

Yours very respectfully, CLINTON McNeil.

LETTERS REQUESTING PAYMENT

The composition of a letter requesting payment of an account is often a perplexing task, particularly if the person or firm is capable of paying, but careless about it. Such a letter, to be perfect, must not only obtain the money due, but do so without giving offense. Such letters should not, as a rule, be blunt or abrupt, but should courteously and clearly state the reasons for the request. If it becomes necessary to suggest placing the account in the hands of a collector, the suggestion should not be put in the form of a threat but in such language as will show your reluctance about using such means. Generally speaking, a statement of the debtor's account is usually all that is necessary to remind him that payment is expected when due.

If necessary to request prompt payment, something like the following may be used:

New York, N. Y., May 1, 1904.

Mr. D. C. GOWAN.

Oswego, N. Y.

Dear Sir:—Inclosed please find statement of your account for April, which we trust you will find correct.

We would appreciate it if you will kindly check same at your earliest convenience and send us a N. Y. Draft for the amount.

Yours truly.

SMITHSON & DEWSNAP.

If the debtor is tardy a second request might be worded as follows:

New York, N. Y., May 20, 1904.

Mr. J. G. HOMER,

Newark, N. J.

Dear Sir:—We respectfully call attention to your account, which is now some time past due, and ask if you cannot favor us with your check by return mail.

or.

Not hearing from you regarding the amount of your account, now past due, we take the liberty of drawing on you at three days' sight, and trust that you will kindly honor the draft when presented.

Thanking you in advance, we are,

Yours truly.

CONNOR & BLAINE.

Concord, N. H., April 1, 1904.

Messrs. Maxwell & Gordon,

Trenton, N. J.

Gentlemen:—The Second National Bank has this morning returned to us our Draft on you, dated March 10th for Fifty-four Dollars (\$54.00) with the explanation, "No attention paid to notice." Since we have given you all the time you asked for the payment of your account, unless some satisfactory explanation is forthcoming you will put us under the necessity of placing your account in the hands of our collector.

Awaiting a prompt reply, we are,

Respectfully.

DAVIS & LAWRENCE.

LETTERS OF APOLOGY

He is an unmanly man who has not grace to apologize for inflicting a wrong, knowingly or otherwise.

If you owe an apology, make it promptly. The longer you let it go, the harder it becomes to offer. Failure to pay an account or keep a business engagement may be unavoidable, but neglect to explain matters invariably leaves a bad impression on the one to whom the explanation is due.

Apology for Failure to Keep a Business Appointment

Akron, Ohio, Jan. 27, 1904.

Mr. J. NORTHCOTT

Columbus, Ohio.

Dear Sir:—I very much regret that I was unable to meet you at the "Conwell House" yesterday as I had expected. Owing to a smash-up on the road, my train was so much behind time it was impossible for me to keep the engagement.

If you will kindly inform me when it will be convenient for you to see me I will be glad to arrange my business and meet you on whatever date you may suggest.

Sincerely yours,

WM. J. KING.

Apology for Failure to Pay an Account

Watertown, S. D., April 4, 1904.

Messrs. Geo. Moore & Co.,

Fargo, N. D.

Gentlemen:—We owe you an apology for not having settled our account the first of the month as promised. We have been disappointed in not receiving returns for several large shipments the past month, but expect to be able to settle our account in full not later than the 20th inst.

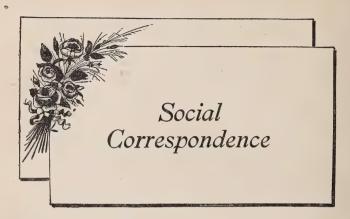
If you will kindly give us this extension of time we assure you the account will then be paid.

Trusting that we have not put you to any inconvenience, we are,

Very respectfully yours,

Conger & Dun.





To be able to write suitable letters of friendship is an accomplishment very much to be desired, and ought to be an aspiration of every one, for while all do not have business letters to write, yet there is scarcely any one who is not called upon at some time to write letters of a social nature.

While many persons write good business letters they may find it necessary to cultivate greater ease of expression in their social letters than the terse style they use at their office desks.

The Paper.—The size and kind of paper will depend somewhat upon the purpose for which it is to be used. Generally speaking, what would be suitable for business letters would not be for social correspondence, excepting Commercial Note, 5x8 in., which may properly be used for either. This size is the most suitable for gentlemen. Ladies generally prefer Billet, 4x6 in., Octavo Note, 4½x7 in., although other sizes are in use.

Lightly tinted and perfumed paper may be used by ladies, but it is not good taste for gentlemen to use either.

Inks.—Black or blue-black inks are the only colors that should ever be used.

Pens.—Whatever is most suitable to the style of your penmanship.

Envelopes.—Two styles are in general use. One, nearly square, to contain the note sheet folded once, and the other oblong, which contains the note sheet folded twice, once each from top and bottom. These are a little larger each way than the folded sheet. They should be of the same color as the paper.

Parts of a Letter.—Much of what has been said regarding the parts of a business letter applies to the parts of a social letter.

Heading.—Form and position the same as in business letters.

Address.—When the address is given in social letters its proper position is at the close of the letter, on the next space below the signature, and commencing at the left-hand side of the sheet at the marginal line. Many social letters written nowadays do not contain any address, the salutation being made to do duty for both, yet the address, placed at the close, imparts a tone of respect to the letter, and may always be added with propriety, especially in writing to our superiors.

Salutation.—What has been said regarding the salutation in business letters applies in social letters. The position of the salutation is the same as the first line of the address in business letters, and the familiarity and warmth of the expression used depends entirely upon our relationship or intimacy with the friend written to, and the subject of our correspondence.

The qualities that combine to make an agreeable associate are required to make a desirable correspondent, and too great familiarity is not one of them.

The circumstances and variety of expressions are so many that we refrain from giving examples.

Body of the Letter.—The body of the letter in social correspondence usually begins to the right of the salutation and on the next line below. Both sides of the sheet may be written on if the letter is more than one page in length.

The Complimentary Closing.—Occupies the same position as in a business letter and should be in keeping with the salutation, and the subject of the letter.

The Signature.—Usually in letters of intimate friendship only the given name is signed. One point in favor of signing the whole name is this: if there is any uncertainty about the letter reaching the person to whom you address it, your name will insure the letter being returned to you in case it is sent to the Dead Letter Office,

LETTERS OF AFFECTION

Letters of Affection are such as grow out of our regard for others. They are as different as our relations to others, and may be simply the expression of kindly feeling or of the strongest impulses that move the human heart.

Letters of affection add much to human happiness, and more of them should be written. To that boy away from home, or father, mother, or sister at home, what gladness a good letter brings! Our pleasure in receiving such letters should remind us of our duty to our dear ones in the matter of writing them.

Letters of this class may often be enlivened by playful allusions, jests and familiarities, provided the writer is sure he will not be misunderstood.

The most elegantly composed letter will not bring one-half the pleasure to a far-away relative that a simple letter crowded with feelings of home life and home love will.

Since no form would perhaps fit one case in a hundred we only give the following example, which we consider a model of good-humored playfulness, and without formality, written by Dr. Franklin to his wife:

Easton, Nov. 13, 1756.

MY DEAR CHILD:-

I wrote to you a few days since by a special messenger, and enclosed letters for all our wives and sweethearts, expecting to hear from you by his return, and to have the Northern newspapers and English letters per the packet; but he has just now returned without a scrap for poor me. I had a good mind not to write you by this opportunity, but I never can be ill-natured enough, even when there is the most occasion.

The messenger says he left the letters at your house, and saw you afterwards at Dr. Duche's, and told you when he would go, and that he lodged at Hovey's, next door to you, and yet you did not write; so let Goody Smith give one more just judgment, and say what shall be done with you.

I think I won't tell you that we are all well, nor that we expect to return about the middle of the week, nor will I send you a word of news,—that's Poz.

My duty to mother, love to children and to Miss Betsey and Gracy, etc.,etc.

I am your loving husband,

BENJAMIN FRANKLIN.

P. S.—I have scratched out the loving words, being written in haste by mistake when I forgot I was angry,

LETTERS OF FRIENDSHIP

Letters of Friendship make up that large class of written messages that strengthen the bonds of friends absent from one another. The chief charm of such a letter is its natural, conversational style. It should cause the person reading it to feel as though he had been favored with a pleasant visit, rather than a formal call.

Thus, Bayard Taylor, while in Germany, writes to an intimate friend in America:

"Your letter came four or five days ago, and I take my first leisure to answer it. I take it for granted that this will find you in your Tenth Street rooms, which are so clear in my memory that a letter is more like a personal meeting to me than when you were in Rondout. You somehow manage to bring your own bodily self before me when you write: I see your eyes and the changing expression of your face, as I read, and the sound of your voice accompanies the written words. Thus your letters are most welcome, no matter what you write. * * * "

To another:

"You made your short note so pleasant that I can't scold you for its brevity; yet I should like to. There might have been so much more of what may seem personal or domestic 'nothings' to you, yet have such value at this distance. * * * *"

Freshness and originality in expression should be cultivated, especially in the opening and closing sentences. Avoid old and time-worn phrases as,

"I thought I would write you letting you know," "I now take my pen in hand," etc.

How refreshing to receive a letter from a friend who begins to talk to us from the first line; for instance,

"It was kind of you to send me a good, long letter while I was lying all alone in my room with nothing to do but take villainous doses of medicine;"

"It was a delight to me to see your hand on an envelope again;"
"I found your letter waiting for me on Monday when my holiday closed."

Compare also such closing sentences as:

"Having told you all I know or care to write, I will now close;"

"I must bring my letter to a close, as I have nearly filled the sheet;"

with such as

"Recollect that I am absent and you are at home, so your letters are worth the most;"

"Remember me very kindly to your brother and my old friends on the hill, and believe me, "Yours very sincerely,

To be perfectly free and unrestrained in familiar letters, forms may be set aside in a pleasing manner, especially in the beginning of a letter. Some of our best authors set us good examples, as:

Boston, Dec. 10, 1840.

Don't, dear Lieber, be offended by my long silence. For the last few days I have been all the time in court. * * *

Ever and ever yours,

CHAS. SUMNER.

(Sumner to Mr. Tower.)

Never, my friend, when the heavens have been dressed in their scorching robes of brass for weeks, was a drop of rain more grateful than your timely epistle. * * *

(Sydney Smith to Lady Grey.)

Dec. 8, 1838.

Awkward times, dear Lady Grey! However, you see those you love sooner than you otherwise would have seen them. * * *

(To Lady Holland.)

If all the friends, dear Lady Molland, who have shared in your kindness and hospitality * * * *

Gad's Hill, Oct. 3, 1866.

MY DEAR FIELDS:-

I cannot tell you how much I thank you for your kind little letter, which is like a pleasant voice coming across the Atlantic, with that domestic welcome in it which has no substitute on earth. If you knew how strongly I am inclined to allow myself the pleasure of staying at your house, you would look upon me as a kind of ancient Roman (which I trust I am not) for having the courage to say no. But if I gave myself that gratification in the beginning, I could scarcely hope to get on in the hard "reading" life, without offending some kindly disposed and hospitable American friend afterwards; whereas, if I observe my English principle on such occasions, of having no abiding place but a hotel, and stick to it from the first, I may perhaps count on being consistently uncomfortable.

The nightly exertion necessitates meals at odd hours, silence and rest at impossible times of the day, and a general Spartan behavior so utterly inconsistent with my nature, that if you were to give me a happy inch, I should take an ell, and frightfully disappoint you in public. I don't want to do that, if I can help it, so I will be good in spite of myself.

Ever your affectionate friend, CHARLES DICKENS.

LETTERS OF CONGRATULATION

Letters of Congratulation are those written to friends upon any occasion of success, joy, honor, or advancement, or when they have in any way been especially favored. They should only be written when we can heartily enter into the spirit of rejoicing with the one to be congratulated. Nothing but the most natural, hearty and genuine feelings of joy should be expressed in our letter, and that in our happiest way of putting it.

Letters of congratulation are generally brief—sometimes only a telegram—and contain nothing regarding other matters. It depends somewhat upon the occasion, how much may be said in the letter, as, for example, the following written by Charles Sumner to a friend just home after some absence from his family.

Hudson, on the North River, Tuesday Evening, Sept. 28, 1841.

DEAR LIEBER:-

Here I am imprisoned by the rain in the inn of a Yankee village. Longing for companionship, I write to you, and while I write, imagine that I have it—as the ostrich supposes himself free from danger when he has thrust his head in the sand. * * *

I trust you have had fair breezes and this letter will find you with her who loves you so well and with your boys frolicking about you. Ah! my dear Lieber, are you not happy? I know where you live. I wish your home were more according to your heart; but you have sources of the highest happiness—domestic bliss of the rarest kind; constant and honorable employment for your time; a distinguished name; and the consciousness of doing good, of aiding the cause of truth; of education, and government.

I know few persons who have such reasons for blessing God as you. * * *

Ever yours,

CHARLES SUMMER.

Congratulating a Lady on Her Marriage

St. Paul, Minn., May 19, 1904.

MY DEAR EVA:-

It was with heartfelt pleasure that I learned of your marriage to Mr. Howard, and I pray that time may but unite more closely your heart to that of the noble man to whom you have confided your life's happiness.

Hoping I may hear from you soon, and that you will pay me a visit on your return,

I remain your old friend and schoolmate,

EMILY BLANCHARD.

To Mrs. Eva Howard, Washington, Oregon.

Congratulating a Gentleman on His Marriage

Concord, Mass., Nov. 9, 1904.

MY DEAR MR. ALLEN:-

I hasten to offer you my congratulations and sincere good wishes in regard to your recent happiness. I hope that each day may but add to the domestic joys of yourself and estimable wife. Yours sincerely,

MRS. D. J. WIGHTMAN.

Congratulating a Friend on the 25th Anniversary of Wedding

Melrose, Fla., Sept. 9, 1904.

MY DEAR MRS. ADAMS:-

If my memory is faithful, it is just twenty-five years to-day since I had the pleasure of congratulating your good husband upon his wedding and tendering to you my sincere good wishes.

Permit me to congratulate you both upon having completed the silver circle, and offer my best wishes that you may long live together and experience as much happiness in the future as your faces prove you have enjoyed in the past. With best regards to yourself and husband, I am,

Your friend,

CHAS. OKER.

Congratulating a Friend on the Birth of a Son

Vernon, Pa., June 19, 1904.

MY DEAR MR. GARDNER:-

Allow me to present to you my most hearty congratulations on the birth of your son, and my sincere hopes that he may prove in very truth a blessing to his parents, and the pride and comfort of their old age. As for the little fellow himself, I could wish him no greater happiness than to be born of such parents and in such a home.

Your friend,

JOHN CULLEN.

LETTERS OF INTRODUCTION

Like letters introducing acquaintances for business purposes, social letters of introduction should be given only when the person writing them is satisfied that it will be desirable for all parties concerned. Your letter is an endorsement of your friend's character and qualities and if they are not all that might be desired, it reflects on you.

You may speak in complimentary terms of your friend, but not in such a way as to make him feel embarrassed in presenting the letter.

Residents should first call upon a new neighbor unless he brings a letter of introduction. In that case the new-comer may call first. If a stranger sends you a letter of introduction and his or her card, it is your duty to call the next day, or send an invitation to call upon you.

The following are examples of letters of introduction:

Hudson, N. Y., April 2, 1904.

Mr. H. R. BELDEN,

Boston, Mass.

My Dear Sir:—This will introduce to your acquaintance my friend Mr. Reynolds, for whom I have great esteem, and whom I am sure you will be happy to know.

Any attention you may have in your power to bestow during his visit to Boston will be gratefully reciprocated by Your friend,

H. S. WHITE.

Newfane, Wis., Dec. 9, 1903.

Mr. T. H. GRIFFIN,

Springfield, Ohio.

Dear Sir:—I take much pleasure in introducing to you my esteemed friend, Miss Clara Harland, a young lady who will spend a few months in your city. I am sure an acquaintance with her will be a pleasure to you.

Any favor you may show her during her stay in your city I shall consider a personal one. Yours sincerely,

MRS. J. H. HOWARD.

Hartford, Conn., May 6, 1904.

MY DEAR MISS JOHNSON:-

My friend, Mr. T. E. Carter, purposing to make his home in your city, I venture upon the kind hospitality you have always extended to me to introduce him to yourself and family. Trusting that the acquaintance will be as pleasant as mine has been with both yourself and him,

I am, very respectfully,

Your friend and well-wisher,
J. F. GLENNON.

LETTERS OF CONDOLENCE

Letters of condolence are written to express sympathy with those who have suffered loss or bereavement. The task, especially in the latter case, may not be an easy one, for if improperly worded instead of bringing comfort it might only add to the sorrow. The difficulty of the task should not prevent us from performing our duty to the best of our ability.

Let your letter be brief. Show your own sorrow or sympathy in well chosen words.

Be considerate, and omit mentioning names and the details of the sorrow, as they only open afresh the wounds.

Do not try to point out what might have been if this or that had been done.

Give comfort, or withhold writing. A fine example occurs in the correspondence of Charles Sumner, and part of his beautiful letter to Charlemagne Tower on receiving news of the death of Mr. Tower's father, is here given.

Cambridge, Friday Morning, May 11, 1832.

MY DEAR FRIEND:-

The moment I saw the black seal of your letter, my mind anticipated the sorrowful intelligence it bore. Permit me to join with you in grief. I offer you my sincere sympathies. The loss of a father I can only imagine; may God put far distant the day when that affliction shall come upon met You have been a faithful son, and I know a joy to his eyes. I reverence the spirit with which you have sacrificed all your professional and literary predilections. You did that for your father's sake, and the thought that you did it on his account must be to you a spring of satisfaction and consolation as hallowed as the grief you feel. * * *

Believe me ever your true friend,

CHARLES SUMNER.

Perhaps no better specimen of a letter of condolence can be found than the following, from the pen of the lamented Lincoln. The original letter adorns the walls of a hall in the College of Brasenose, at Oxford, where it is looked upon with deep interest by American visitors and is treasured by the authorities of the college. It explains itself.

Executive Mansion, Washington, Nov. 21, 1864.

DEAR MADAM:-

I have been shown in the files of the War Department a statement of the Adjutant-General of Massachusetts, that you are the mother of five sons who have died gloriously on the field of battle. I feel how weak and fruitless must be any word of mine which should attempt to beguile you from the grief of a loss so overwhelming. But I cannot refrain from tendering to you the consolation that may be found in the thanks of the Republic they died to save. I pray that our Heavenly Father may assuage the anguish of your bereavement, and leave you only the cherished memory of the loved and lost, and the solemn pride that must be yours to have laid so costly a sacrifice upon the altar of freedom.

Yours very sincerely and respectfully,

To Mrs. Bixby,

ABRAHAM LINCOLN.

Boston, Mass.

To a Friend on Loss of Home by Fire

Albany, N. Y., July 4, 1904.

MY DEAR MRS. HOLMES:-

I have just learned of your loss of last evening, and hasten to offer you my sympathy; for, except loss of life, there can be none greater than that of the home, round which so many pleasant memories cling, and in which we have gathered so many household treasures which no money can replace. I know also what a feeling of desolation must come over you to-day.

Accept my earnest sympathy, and, if I can in any way aid you, do not fail to call upon me. Yours,

E. A. DEWITT.

To a Friend on the Death of a Son

Milwaukee, Wis., Oct. 2, 1904.

Mr. EUGENE EAGAN.

Yankton, New York.

My Dear Friend:—It is with deepest sympathy that I write to you, realizing how profound must be the sorrow when he is taken away who, for so many years, has been the comfort and pride of a father's declining life. Still a few more days here, and I trust we will all be united to friends who have been mercifully, no doubt, taken away from us who mourn here below.

I need hardly say that you can now, more than ever, rely upon my aiding you in any way in my power. Your most sincere friend,

CHARLES D'ORSAY.

LETTERS OF LOVE AND COURTSHIP

No class of letters consumes so much time and thought, or causes the writer more anxiety than love letters; however, when true affection prompts the message, little guidance will be needed in the composition.

The charm of this correspondence lies in the similarity of tastes, and the tone of earnest affection which is given to the message.

Never indulge in flattery, but remember the first element of lasting affection is respect.

Ladies especially should be careful to preserve their dignity, and guard their future reputations when committing anything to paper.

Secret correspondence should not be indulged in. Liberty from parents or guardians should always be sought first.

We give no samples of love letters. No one would want to receive one written in a copied form. If to be without a copy leaves a fellow to make a fool of himself, better for the other party to find it out early.

Asking Permission to Call

16 Hawley St., March 15, 1904.

DEAR MISS BREE:-

Presuming somewhat upon our former acquaintance, I hope to be pardoned for this little note, which is to ask permission to correspond with you, and also to have the pleasure of calling on you at your home.

Anxiously awaiting a favorable reply,

I am very truly your friend,

Miss Mary E. Bree, 204 Elm St., City.

CHARLES G. VENN.

A Favorable Reply

204 Elm St., March 16, 1904.

DEAR SIR:-

Our former acquaintance, though not extensive, has been pleasant, and I do not find it in my heart to object to your kind request.

With pleasure I subscribe myself,

Your sincere friend, MARY E. BREE.

An Unfavorable Reply

City, March 16.

DEAR SIR:-

Your very kind note has been duly received, and in reply I am permitted to say but this: Although highly flattered by your request, I am not at liberty to grant it.

With sincere regards,

I remain your friend,
MARY E. BREE.

Charles G. Venn, 16 Hawley St.

From a Gentleman to the Father of a Lady, Requesting Her Hand in Marriage

No. 356 Greenwood Ave., Aurora, Ill., March 25, 1904.

Mr. JOHN FENTON,

Aurora, Ill.

My Dear Sir:—I am certain you will not be surprised when I tell you that, through my frequent visits at your house and your kind hospitality to me, I have learned to regard your daughter with a most sincere affection. Knowing that her welfare and happiness must be the first consideration with you, I hasten to acquaint you with my feelings.

I am, as you are aware, not lacking in this world's goods; and, if an honest and sincere affection can secure her happiness, these certainly shall not be wanting. Will you trust her to me? I anxiously await your answer.

Very respectfully.

CLARENCE SHAW.



Notes of invitation for large gatherings are usually engraved or printed and should be sent at least a week or ten days in advance, and should be written in the third person.

Among friends of long acquaintance a familiar note is in better taste.

For less informal gatherings, invitations may be sent out nearer the date of the occasion, and need not necessarily be written in the third person.

Notes of invitation for teas, luncheons and evening parties should be written in the name of the hostess.

The time-worn custom of *presenting compliments* in an invitation is passing out of usage.

Invitations to dinner, breakfast, or luncheon require prompt answers, and the answer should be written in the same form as the invitation.

Invitations to receptions or an "At Home" do not require an answer. If the person receiving an invitation is unable to attend an "At Home or "Afternoon Tea" it is proper to send her card the afternoon of the occasion.

Wedding invitations should be issued not later than fifteen days, nor earlier than four weeks before the date of the ceremony.

They are either engraved or printed (printers now have several fine lines of type that produce work about equal to engraving) on fine white or cream tinted paper, the correct size of which is about $7\frac{1}{4}x6\frac{1}{2}$ inches and folds once to fit the envelope.

INVITATIONS TO LUNCHEON

Mrs. John Cass Morgan

requests the pleasure of

company at luncheon

at o'clock

Sen Park Avenue,

Invitation by Note

69 Dorchester St., May 12, 1904

DEAR MRS. PATTERSON:-

I should be pleased to have you lunch with me on Tuesday, the ninth, at half past one o'clock.

Trusting no previous engagement will compel you to deny us the pleasure of your company, I am, $$\operatorname{Sincerely}$$ yours,

ETHEL B. HARRIS.

or

It is quite correct for the hostess to mail her calling card, with the announcement,

> Luncheon at 1:30 o'clock May ninth

written beneath her name.

Invitations to Receptions

These invitations are now sometimes issued in the name of the gentleman as well as that of his wife, reading,

Mr. and Mrs. Henry Coghill

at home

Thursday afternoon, April 28 from four until seven o'clock

Twenty-six Congress Ave.

When a mother and daughters receive, the card is in this form,

Mrs. Henry Coghill,

The Misses Coghill

at home

Etc.

Invitation to Evening Party

. Mrs. Elliott requests the pleasure of Mr. and Mrs. Shaw's company on the evening of May 4th at eight o'c lock.

14 Kingston Place.

Invitation to Ride

Mr. Bell would be much pleased if Miss Rennie would accompany him in a drive to Lookout Point this afternoon at two o'clock, May 10th, 1904.

ANSWERING INVITATIONS

Accepting Invitation to Lunch

Mrs. William K. Norman

accepts with pleasure

Mrs. John C. Morgan's

kind invitation to luncheon

on Friday, May 6th

at one o'clock

Reply to Familiar Note

DEAR MRS. HARRIS:-

It gives me much pleasure to accept your kind invitation to luncheon on Tuesday, the ninth, at half-past one o'clock.

Sincerely yours.

JEAN A. PATTERSON.

Regret in Answer to Invitation to Evening Party

Mr. and Mrs. Shaw regret that owing to the ill health of their little daughter, they are compelled to decline Mrs. Elliott's kind invitation for May fourth.

Maplewood House.

The ability to gracefully accept or decline an invitation is quite as essential as to know how to write an invitation.

WEDDING INVITATION

Mr. and Mrs. Charles H. Hillman

request the honor of

your company at the marriage of their daughter

Edna May

to

Louis Bates Gould

on Wednesday Evening, May fourth

Nineteen Hundred Four

at half-past six

(church or home address)

At home

Kensington, Jowa

Where a reception follows the wedding, a card of medium size is enclosed with the wedding invitation, and may be inscribed thus: Reception from seven o'clock,

Twenty Conklin Avenue

When a wedding has been celebrated with only a few friends present, it is customary to send out announcement cards. They are posted on the day of the wedding to all friends of the bride and groom. The usual form of such announcement reads:

Mr. and Mrs. William Kennedy have the honor of announcing the marriage of their daughter

Florence

to

Mr. Abner S. Woodman

nineteen hundred and four, at

St. Stephen's Church

This announcement may be accompanied by a card bearing the joint name of the newly married pair, giving the address of their future home.

CALLING AND BUSINESS CARDS

Visitings Cards for Ladies.—Usually a married lady's card is larger than the one used by unmarried ladies.

Pure white bristol board of medium weight with the name engraved or printed in script in black ink are the only ones used in good society. Never use bevel or gilt-edged cards or any decorations other than the name, address, and day at home. In small towns the address may be omitted.

An American Lady's card should never bear any title other than Mrs. or Miss. She is not privileged to use on her card her husband's professional or dignitary title. The wife of the President is merely, Mrs. Theodore Roosevelt.

Cards of the most approved style give the full Christian name or names as well as the surname.

Mrs. Norman Gray Davis

Miss Mary Davis

If there are not other families of the same name, so that confusion might result, the eldest daughter may omit her Christian name and use a card reading, for example, Miss Davis.

The day of the week on which a lady desires to receive callers may be printed or engraved on the lower left-hand corner, thus, *Thursdays*, etc.

A gentleman's visiting card is both smaller and thinner than a lady's. Style of inscription as follows:

Mr. Albert Louis Coombs

The title Mr. is never omitted unless the name is followed by Jr. A man never has an "at home" day on his card.

Business cards are used for introducing a representative of a business house, for advertising, etc. They usually bear the name of the house and address, the nature of the business and the representative's name. No prescribed rule can be laid down as to size, etc.

Titles in Use in the United States

"The President of the United States"; "His Excellency," Governor of any State, and Ministers to foreign countries. "Honorable" is applied to the Vice-President of the United States, members of the Cabinet and members of Congress, heads of departments, judges, consuls, mayors of cities, etc.

D. D., doctor of divinity; LL. D., doctor of laws; Rev., minister of the Gospel; Dr., physician and surgeon; Prof., professor or teacher; Esq., member of the legal profession, etc., indiscriminately used; and other professional titles too numerous to mention.

TITLES OF THE DIGNITARIES AND OTHER OFFICERS OF THE CATHOLIC CHURCH

The Pope, "His Holiness Pius X.;" a cardinal, "His Eminence James Cardinal Gibbons;" an archbishop, "Most Rev. Henry Spaulding, D.D.;" a bishop, "Rt. Rev. M. Flannery, D.D.;" a vicar-general, "Very Rev. Edward Weiss;" a parish priest, "Rev. James Moore, P. P.;" a lady superintendent of a convent, "Sister Superior."

MILITARY TITLES IN THE UNITED STATES

Commissioned Officers

General of the Army (This title lapsed with the death of Gen. Sheridan),
Lieutenant-General of the Army,
Major-General,
Adjutant-General,
Inspector-General,
Ouartermaster-General.

Commissary-General,

Paymaster-General.

Brigadier-General,
Brigade Inspector,
Colonel,
Lieutenant-Colonel,
Major,
Captain,
Chaplain,
Adjutant,
First Lieutenant,
Second Lieutenant.

Surgeon-General,

TITLES OF NAVAL OFFICERS

Admiral,
Rear-Admiral,
Vice-Admiral (This title is not now in use),
Commodore (This title has recently been abolished),
Captain,
Commander,
Lieutenant-Commander,
First Lieutenant,
Second Lieutenant,

Ensign,
Midshipman,
Paymaster,
Assistant Paymaster,
Chaplain,
Chief Engineer,
Purser,
Mate — First, Second and
Third,
Quartermaster,
Master-at-Arms.



RESOLUTIONS RESOLUTIONS

Resolutions are the expressed opinion of bodies such as councils, societies, committees, or any organization on any matter they may have had under consideration.

Resolutions in form should be prefaced with a preamble, which should state the reason or occasion of the statements that follow, and should bear the signature of the committee framing them.

FORMS OF RESOLUTIONS

Retirement of an Officer

Whereas, Our esteemed friend and fellow citizen is, on account of bodily infirmities, compelled to resign as president of our organization; and

WHERE C., He has for many years filled the office from which he now retires, with great acceptability and universal satisfaction, therefore,

Resolved, That we hereby express to him our sincere thanks for his untiring labors in behalf of our organization and of the public interest, and assure him of our earnest wish that he may enjoy the happiness of a peaceful and serene old age.

Resolved, That a copy of these resolutions, properly engrossed, be presented to him as a mark of our esteem.

Resolution of Thanks

Resolved, That an expression of our appreciation be hereby given to our esteemed chairman, who has presided over the deliberations of this body with impartiality, dignity and marked ability, as well as to the other officers for the faithful performance of duties.

We recommend, That suitable resolutions be drafted by a committee of five appointed by the chair.

Resolution of Sympathy

WHEREAS. It has pleased the Almighty to remove from our midst, by death, our esteemed friend and co-laborer, K. C. Chapman, who has for many years occupied a prominent rank in our midst, maintaining under all circum-

stances a character untarnished, and a reputation above reproach.

Therefore, Resolved, That in the death of Mr. Chapman we have sustained the loss of a friend whose fellowship it was an honor and a pleasure to enjoy; that we bear willing testimony to his many virtues, to his unquestioned probity and stainless life; that we offer to his bereaved family and mourning friends, over whom sorrow has hung her sable mantle, our heartfelt condolence, and pray that Infinite Goodness may bring speedy relief to their burdened hearts and inspire them with the consolations that Hope in futurity and Faith in God give even in the Shadow of the Tomb.

Resolved, That a copy of these resolutions, properly engrossed, be

presented to the family of our deceased friend.

Committee:

J. K. ARTHUR, President. HARRY STONE, Secretary. R. K. COLLINS. A. WESTLAND, J. Anderson.

You Will Never Be Sorry:

For living a white life. For hearing before judging. For being candid and frank. For thinking before speaking. For harboring clean thoughts. For discounting the tale-bearer. For standing by your principles. For stopping your ears to gossip. For asking pardon when in error. For being as courteous as a duke. For the influence of high motives. For bridling a slanderous tongue. For being generous with an enemy. For being square in business deals. For sympathizing with the oppressed. For giving an unfortunate fellow a lift. For being patient with cranky neighbors. For promptness in keeping your promises.

For putting the best possible construction upon the doings of others.



PUBLIC SCHOOLS

Laws Governing the Rights and Duties of Directors, Teachers, Pupils and Parents

School Management.—In most of the States the management of the public or common schools is placed by statute under the exclusive control of directors, trustees, committees, or boards of education.

School Books and Course of Instruction —Where the management has thus been placed under the exclusive control of the directors, they have the right to determine what books shall be used and what instruction shall be given in the schools.

Separate Schools.—Where the legislature of a State confers upon boards of education the power to establish separate schools for white and colored children, this may be done without violating the fourteenth amendment to the constitution of the United States. And where under such statutory provisions appropriate schools for colored children are maintained, such children may be lawfully excluded from schools established for white children.

But unless expressly conferred by statute upon boards of education, the power to establish separate schools does not exist.

The courts will compel the trustees to admit colored children to the public schools where separate schools are not provided for them. Employment of Teachers.—By statute in all the States the authority to employ teachers for the public schools is conferred upon school boards, directors, trustees, and committees.

Certificates of mental and moral qualifications are required of teachers in most of the States.

In some States these certificates are given by a board of examiners and in others by the county superintendent of schools.

Tenures and Salaries.—As a general rule teachers are employed for a year only at a time, but sometimes the teacher is first selected for one year, then, if reëlected, for two years, then for four, and then for good behavior. This is the practice in Cincinnati, Ohio.

The Salary of a public school teacher is not attachable by trustee process while in the hands of city officials whose duty it is to pay it.

Terminating Teacher's Contract.—The contract made with a teacher for a period extending beyond the trustees' term of office is valid and binding on their successors in office.

School directors cannot terminate a contract with a teacher by doing away with the particular school in which he is engaged in teaching.

Dismissal of Teachers —No teacher holding a proper certificate can be dismissed without sufficient cause. Unfaithfulness, incompetency, and inability to properly govern the school, are held to be, either separately or combined, sufficient cause for dismissal.

If dismissed without sufficient cause, the teacher's remedy is the same as for breach of any other contract.

If unwarrantably interfered with or obstructed in the discharge of his duties by the directors, the teacher has his remedy in an action for damages.

Janitor Work cannot be required of a teacher, unless it is so specified in the contract.

Closing School.—When the school is closed by the district officers on account of the prevalence of a contagious disease, and the teacher stands ready to perform his contract, he is entitled to full salary during the time school is closed.

Legal Holidays.—It has been held by the courts that in the absence of statutory requisitions a school should be allowed the legal holidays without deduction of salary to the teachers.

Teachers May Expel or suspend pupils for sufficient cause, as

for breach of discipline, refusal to take part in exercises, refusal on part of the parents to sign and return periodical written reports of the pupil's standing, father's refusal to permit the teacher to whip the child or to correct him himself, refusal to study certain branches from which the parents of the child have requested that it might be excused, or misbehavior outside of the school tending to injure the school and subvert the teacher's authority.

Corporal Punishment

The Teacher Stands in Place of the Parent, and while a pupil is under his care, has the same authority as the parent has at home of correcting him by confinement or whipping.

Assaults by Teacher.—Although the teacher has a right to punish his pupils for misbehavior, he will be liable to prosecution for assault if he inflict such punishment as produces or threatens lasting mischief, or if he inflict punishment, not in the honest performance of duty, but under the pretext of duty to gratify malice.

Presumptions in Favor of Teacher.—The teacher has in his favor the presumption that he has done his duty, in addition to the general presumption of innocence, and in determining the reasonableness of the punishment, the judgment of the teacher as to what was required by the situation should have weight, as in the case of a parent under similar circumstances.

Pupils Over Twenty-one years of age who voluntarily attend school, thereby waive any privilege which their age confers, and may be punished as any other pupils.

Indecent Liberties taken by a schoolmaster with a female pupil, without her consent, though she does not resist, constitute an assault.

Parents Should Uphold the Teachers in maintaining school discipline, for upon this the welfare not only of the school but that of the pupils themselves depends. Where a teacher is sure of the parent's aid in the proper correcting of a child, corporal punishment at school is very seldom resorted to or required.

Value of Corporal Punishment.—The right and occasional necessity of corporal punishment being conceded, the question remains: Of what use is it?

"I am confident," says Addison, "that no boy who will not be allured by letters without blows, will ever be brought to anything with them." The following incident may serve as an aid to the proper solution of the question:

"I dunno how 'tis, sir,' said an old English laborer to his clergyman, in reply to a question respecting the bad behavior of his children, "I dunno how 'tis; I beats 'em till they're black and blue, and when they won't kneel down to pray I knocks 'em down, and yet they ain't good."



IN THE MIDST OF LIFE THERE IS DEATH

WILLS

RULES FOR WRITING A WILL

A will is a legal statement of the disposition a person wishes to have made of his property after his death.

The person making the will, if a man, is called a testator; if a woman, testatrix. An executor is one appointed by the will to carry out its provisions and settle the estate. The feminine form of the word is executrix. An administrator is a person appointed by the proper court to settle the estate when there is no will.

How a Will Should be Drawn.—No exact form of words is required to make a will good at law; the provisions of a will should, however, be stated so plainly that its language may not be misunderstood, and care should be taken to comply with the provisions of the statute of the State where the will is made as regards attestation and execution.

WILLS 93

The name, age and residence of the testator should be distinctly stated at the beginning of a will.

A will should contain a clause describing the instrument as the *last* will of the testator (as, "I hereby revoke all former wills made by me at any time"), as the mere making of a subsequent will does not revoke a former one entirely, but only so far as the last made may conflict with the earlier one.

Disposition of Real Estate.—When there are different parcels of real estate it should be specifically described, as in a deed; but where it all goes to one person a general devise, as "I bequeath all my real estate to ——," is admissible.

Personal Property bequeathed should be so described as to render identification practicable.

Property located in another State must be bequeathed in accordance with the laws of that State.

Witnesses.—Great care should be exercised in the selection of witnesses. They should, if possible, be acquainted with the testator and thoroughly understand his mental condition at the time when he executes his will.

A person having a beneficial interest in the will should not be a witness.

The residence of the witness should be placed opposite name.

The number of witnesses required varies in different states.

The witnesses should sign in the actual presence of the testator and where he can see them sign. Minors and married women, if otherwise competent, may be witnesses.

Laws Governing Wills

- 1. All persons of sound mind, of lawful age and such as can freely exercise their own will, may dispose of their property by making a will. In some States married women cannot make a will without the consent of their husbands.
 - 2. A will is not of force until after the death of the testator.
 - 3. The testator can cancel or modify his will at any time.
- 4. The last will annuls all former wills unless it is only an addition to them.
 - 5. A will is good though written with a lead pencil.
- 6. A will made by an unmarried woman is legally revoked by her subsequent marriage unless she takes such legal steps before her marriage as will enable her to dispose of her property afterwards as she sees fit.

- 7. A will should first provide for the payment of all just debts and funeral expenses.
- 8. Property bequeathed, if encumbered with debts, must first be applied to pay them before distribution is made to the beneficiaries.
- 9. A corporation may receive property bequeathed to it, if provision is made for it in its charter for accepting such gifts.
- 10. No husband can by will deprive his wife of her dower, that is, "one-third of her husband's real estate," namely, the proceeds of one-third of the real estate and appurtenances as long as she may live. Additional bequeaths can be made to her by the husband.
- 11. A husband can will his wife a certain amount in lieu (in place) of her dower, stating it to be so intended; this, however, does not deprive her of her dower, provided she prefers it to the bequeath. If the will does not distinctly state that the bequest is in lieu of her dower, then she is entitled to both.
- 12. If a married woman possess property, and dies without a will, her husband is entitled to administer upon such property in preference to any one else.
- 13. Any bequest of property made to a subscribing witness is invalid, although the integrity of the will is otherwise not affected thereby.
- 14. The testator's full name should always be written at the end of the will. If he cannot write, he must make his mark, having his hand guided by another person. Such mark, if he is conscious of what he is doing, renders the will valid.
- 15. It is always best if the testator appoints some suitable person or persons to act as executor.
- 16. An executor may always erect a suitable tombstone and charge the expenses to the estate if no other provision has been made.
- 17. If there is no executor named in the will an administrator will be appointed by the court to settle the estate.
- 18. A person appointed executor is not obliged to serve, but may renounce his appointment by a legal written notice, signed before two witnesses, which fact must be recorded by the same officer before whom the will has been proved.
- 19. The will should be presented for probate as soon as possible after the death of the testator.

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Codicils

A written addition made to a will is called a codicil and is executed like a will. It is designed to explain, modify or change former bequests made in the body of the will. It must be executed with equal care as the will itself.

Revocation.—A will may be revoked by an actual destruction or obliteration of the document, or by the making of a new will of later date.

Marriage and the birth of a child after the execution of a will revoked it at common law, and this rule has much force in the United States now, although it is variously modified by statute in the different States. If a man makes a will and subsequently marries, he should be careful to make a new will as soon as possible.

Probate.—No will is effectual to pass either real or personal estate unless it has been duly proved and allowed in the probate court. The attesting witnesses must all, if possible, be produced. If any are dead, or have left the State, proof of their handwriting may be required.

So long as the probate remains unreversed on appeal, the due execution of the will, the sanity or capacity of the testator, and the attestation of the witnesses, cannot be called in question in the courts of common law.

A codicil requires the same number of witnesses as the will.

Form of Will

I, JOHN R. BAKER, of the city of Freeport, in the county of Stephenson, and State of Illinois, being of sound mind, memory, and understanding, do make my last will and testament in manner and form following:

First. I give, devise and bequeath to my wife, Anna, her heirs and assigns forever, one-half of all my property, real, personal and mixed of what nature and kind soever and wheresoever, the same shall be at the time of my death; the same to be in lieu of her dower at common law.

Second. I give, devise and bequeath unto such of my children, as may be living at the time of my death, one-half of all my property, real, personal and mixed, of what nature and kind soever and wheresoever, the same shall be at the time of my death, to be divided among them there, share and share alike.

Third. I hereby direct and empower my executor to sell and dispose of all my personal property to the highest bidder at auction, as soon as practicable after my death, and to sell my real estate at auction or private, as it may in his judgment seem most advantageous, or for the interest of my said devisees.

Fourth. I hereby appoint my wife, Anna, guardian of the person and estate of such of my children as may be minors at the time of my death.

Fifth. I hereby appoint Joseph M. Baker executor of this my last will and testament.

IN WITNESS WHEREOF, I, JOHN R. BAKER, the testator, have to this, my last will and testament, set my hand and my seal, this eleventh day of July, A. D. 1904.

Signed, sealed, published and declared by the above named John R. Baker, as and for his last will and testament, in the presence of us, who have hereunto subscribed our names at his request, as witnesses thereto, in presence of the said testator and of each other.

ALBERT B. MILLER,
Freeport, Ill.
DAVID SMITH,
Freeport, Ill.
WILLIAM BROWN.

Freeport, Ill.

JOHN R. BAKER. SEAL

Codicil to the Above Will

Whereas, I, John R. Baker, did on the eleventh day of July, one thousand nine hundred and four, make my last will and testament, I do now by this writing add this codicil to my said will, to be taken as part thereof.

Whereas, by the dispensation of Providence, my son William has died on the third day of August, 1904, I give and bequeath unto my nephew, Charles S. Brown, the share of one-half of all my property, real, personal, and mixed, of what nature soever and wherever, at the time of my death, that would have fallen as his share to my son William, if he had lived, as bequeath in the body of this will.

IN WITNESS WHEREOF, I hereunto place my hand and seal, this first day of September, one thousand nine hundred and four.

Signed, sealed, published and declared to us by the testator, John R. Baker, as and for a codicil to be annexed to his last will and testament. And we, at his request, and in his presence, and in the presence of each other, have subscribed our names as witnesses thereto, at the date thereof.

EDWARD J. BRADFORD, Freeport, Ill.

DANIEL F. JOHNSON, Freeport, Ill.

JOHN F. WILSON, Freeport, Ill.

John R. Baker. seal

Form of Will, Where Property is Left to the Wife Absolutely

This is the last will and testament of me, DAVID Goss, made this eighteenth day of June, A. D. 1904, in Hamilton, County of Butler, and State of Ohio, as follows:

I bequeath all my lands, tenements and hereditaments, and all my household furniture, ready money, securities for money, money secured by

life insurance, goods and chattels, and all other parts of my real and personal estate and effects whatsoever and wheresoever, unto my wife, Sophia Goss, her heirs, administrators and assigns, to and for her and their absolute use and benefit, according to the nature and quality thereof respectively, subject only to the payment of my just debts, funeral and testamentary expenses, and the charge of proving and registering this my will.

And I appoint my said wife executrix of this my will, and thereby revoke all other wills.

IN WITNESS WHEREOF, I hereunto set my hand and seal, the day and year above mentioned.

Signed, sealed, published and acknowledged by the said David Goss, as and for his last will and testament, in the presence of us, who in his presence, and at his request, and in the presence of each other, have subscribed our names hereunto as witnesses thereof.

John J. Jones, Hamilton, Ohio. Wm. F. Johnson, Hamilton, Ohio. DAVID GOSS. SEAL

TAXES

Every government, whether of town, State or nation, is under the necessity and has the right to raise the necessary funds to carry on all the functions of the government.

Definition.—Tax is the sum of money which the government demands from the individual or from his property to pay for the benefit he receives from the government.

The government protects him in his rights, protects his property and often advances the value of the same by public improvement. It therefore has a right to levy a tax upon him and his property.

Kinds of Taxes.—Taxes are either direct or indirect.

Direct Taxes are those which are levied directly upon persons, property, incomes, etc.

Indirect Taxes are such as are assessed on manufactures, imports, etc., as the customs tariff and most of the excise or internal revenue taxes.

Taxation in the United States ranges itself under the three heads of federal, State, and municipal.

Federal Taxation is laid almost wholly in the form of duties upon manufactured goods imported from foreign countries, and excise or internal revenue taxes laid on the manufacture and sale of liquors, cigars, etc., and collected in great part by means of stamps. In 1861 a tax was imposed on incomes over \$800, and during its ten years' continuance realized for the government \$365,000,000. An income tax was again imposed in 1894, but was declared to be unconstitutional by the U. S. Supreme Court.

State Taxation is laid upon property by a periodical valuation. In some States this is supplemented by taxes on occupations or "privileges," on franchises of corporations, on legacies, etc.

Municipal or local taxation is commonly very much heavier than State taxation. It embraces: (1) all taxes laid for the general purposes of counties, cities, boroughs, towns and villages; and (2) those local taxes which are usually called assessments, and which are laid in special districts supposed to be peculiarly benefited by the construction of some public work, and by some rule of apportionment which proposes to charge each item of property within the district in proportion to the benefit it will receive.

Poll Tax.—Some States levy tax upon all male citizens over twenty-one years of age, others upon all voters. This is called *poll tax*.

Property Tax.—Tax levied upon property, real or personal, is called $property\ tax.$

Valuation of Property.—The assessor of the town or city estimates the true value of every piece of taxable property, which is usually lower than the market value. It makes little difference whether the property's valuation is high or low, because the amount of tax to be raised is rated according to the valuation, but it is of importance to any individual taxpayer that the valuation of his property shall be neither higher nor lower than that of others.

In many States when county taxes are levied, there is a county board of assessors who receive the tax lists from the assessors of the several towns and cities within the county, and if necessary, in their judgment, they make such changes as justice seems to demand. To them an individual who believes himself overtaxed can within a certain time appeal for correction.

For the State tax, there is in many States a State Board of Equalization. This board receives the lists from all the counties

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and makes the necessary equitable adjustment of taxes throughout the State.

Levying Taxes.—The rate of taxation is determined as follows: Having placed the valuation upon all the property, there is fixed the amount of money to be raised by the town; from this sum the poll tax (where there is any) is subtracted. If this sum is divided by the total valuation of the property of the town the quotient is the rate of taxation; that is, the sum to be raised on each dollar of property.

The amount varies all the way from two mills on the dollar, or perhaps less, to twenty cents on each hundred dollars or two dollars on each thousand dollars of property. In large cities the rate of taxes is sometimes as much as 2 per cent or twenty dollars on a thousand, or even more.

Collection of Taxes.—In many States the town collector collects all the taxes for the town, county and State; in others the county collector collects of all the towns.

Penalties.—The law fixes the time of payment of taxes. If one neglects to make payment within the specified time a fine or penalty is added. If the person is still delinquent after a further specified time the property is sold at auction. The government then collects enough money to pay the taxes and expenses and gives a tax title to the purchaser of the property. The former owner has a specified time in which to redeem his property by payment of the tax and all the cost.

The Treasurer and Auditor.—The collector pays the money collected to the treasurer, whether town or county, and takes a receipt. The treasurer is required to give bond.

The auditor audits every bill presented for payment before the treasurer is permitted by law to pay it. The treasurer's account must, therefore, correspond with the final account rendered by the auditor.

Exemptions.—Many States exempt the following property, viz.: Certain portions of one's personal property, such as tools and utensils of laborers, institutions of learning and charitable institutions, also churches and parsonages.

Real and Personal Property.—A very large part of the taxes must be collected from real estate. The tax from personal property includes all tax except that on lands, lots and buildings. The State tax in our country is usually much less than the town, city or county tax.

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TELEGRAPHS

The business of telegraphy is carried on by corporations and consists of the making and performing of a system of contracts.

Parties to the Contract.—There are two parties to the contract, (1) the sender of the message, and (2) the telegraph company. Each party agrees to do certain things and each must keep his (or its) agreement. If the company fails to do what it agreed, the sender can compel it to pay for all loss resulting.

There is ordinarily no contract between the company and the one to whom the message is sent and it is therefore not responsible for any loss he may suffer.

The Contract.—The ordinary telegraph blank usually constitutes the contract. The sender requests the company to send a message (called a dispatch), and such a request is in effect an offer to pay for the service if rendered. The company by taking the message agrees to send it, i. e., accepts the offer. The request and compliance, or the offer and acceptance, make the contract.

The Terms.—The principal parts of this contract are (1) the sender agrees to pay for the message at the regular rate and the company may refuse to take it unless he pays in advance; (2) the company agrees to send the message by telegraph with promptness, deliver it to the person addressed and not reveal its contents to any one else.

Accuracy.—The message must be sent as it is given. Hence the operator cannot correct evident mistakes, such as mistakes of grammar, nor add, nor omit anything, nor make any change in it.

The liability of the company for mistakes is often limited by its blanks, the blank being drawn in such a way that it is a contract.

Promptness.—The message must be sent as soon as possible and different messages must be sent in the order in which they are received.

Secrecy.—A telegraph company is a confidential messenger. It has no right to reveal the message to any one, except the one to whom it is addressed.

Submarine Telegraphy.—Although the system of transmitting messages by means of electric cables laid on the bottom of the sea has come into use since 1851, it is now in operation in almost

every part of the world. The total length of the submarine cables of the world to-day is over 180,000 nautical miles.

Wireless Telegraphy.—In 1897 Marconi announced a system of wireless telegraphy, operated by means of electrical vibrations set up in one apparatus and transmitted through space to a distant receiving apparatus without the aid of an intervening wire. On December 21, 1902, he established wireless telegraphic communication between Cape Breton, Canada, and Cornwall, England, a distance of 2,300 miles. Messages are now sent regularly by this system for considerable distances, and it is contended that so far as reliability goes, wireless telegraphy is far superior to the ordinary wire lines.

An ocean steamship, with a wireless telegraph equipment on board, is in constant communication with land and with other vessels similarly equipped throughout its trip, and the safety as well as comfort of an oceanic voyage is immeasurably increased by its use.

Wireless telegraphy has been most successfully used in oceanic signaling. The Japanese are in a great measure indebted to it for the success of their navy over that of Russia at Port Arthur, their principal warships being equipped with the necessary wireless transmitting and receiving apparatus.





"The man who is in debt carries a world of trouble."-BURKE.

HOW TO COLLECT DEBTS

Pay as you go, or a strictly cash business, is the best and safest method of doing business. But certain conditions or customs in trade make this sometimes impractical or impossible, and credit must be given. Under this method dishonest, careless or unfortunate people contract debts, then refuse, neglect or are unable to pay them, and collections, peaceable or forced, become a necessity.

The requisite steps to collect such debts are a matter of great importance and should be understood by everybody, but they are not, and much unpleasantness and heavy losses are often the result.

Methods by Which Debts are Contracted

Goods are bought on credit, to be paid for at a definite or indefinite future time. Labor is employed, to be paid for at certain future periods. Lands, houses and other property are purchased under contract of future payment. Money is borrowed, under notes, mortgages or other securities, and many other transactions in business and trade call forth occasions or present temptations to contract debts.

Suggestions for Avoiding Debts

1. Do a Strictly Cash Business.—Better small profits and quick sales, than large profits and long credits.

Mark your goods as low as possible and adhere unswervingly to your cash principle. This is best for buyer and seller. It avoids collections and prevents losses. It saves the time and labor of keeping accounts. This enables the seller to sell cheaper and the buyer to buy for less than on credit.

2. Cautions.—Goods sent abroad should be paid for before the purchaser takes possession.

The time of credit should be as short as possible and the bills collected when due. When working for others collect your wages weekly or monthly, in accordance with the agreement to pay, unless your employer is quite responsible, thus making your dues safe.

In renting lands or houses, a duplicate lease should be made, one for each party, the rent paid promptly when due, at the house or business place of the landlord, and the payment credited on the back of the lease.

In receiving or making payments, a receipt should always be made out; it is a voucher and may save trouble.

Hotel and boarding-house keepers cannot be too prompt and strict in collecting their dues, as their customers are mostly transient, making forced collections sometimes impossible.

Never loan money without requiring a note or a duebill, if the amount is small; this is safest even between the most trusted friends.

When the loan is large, have the note secured by a mortgage on real estate; but see to it that the same is not encumbered by previous claims, which would render your security worthless. It is safest to require an abstract of title and then have your mortgage recorded immediately.

This precaution should also be observed where a chattel mortgage is taken on personal property.

If a small amount of money has been loaned without security, and it can apparently not be collected without legal process, it may be best to drop the matter and consider the loss as so much paid for a lesson in business prudence.

First Steps in Making Collections

These depend very much upon circumstances. The debtor may have met with reverses or a misfortune, rendering him unable to pay at the time specified, and deserving of patience; others may be careless and need a sharp reminder; a third party, inclined to be dishonest, may need close watching. Thus discretion is necessary as to the form and tone of the letters requesting payment. For letter forms illustrating the first efforts in making collections, see pages 65 and 66.

LEGAL STEPS IN COLLECTIONS

No other motive except the question "Will it pay?" should induce a creditor to legally enforce payment. A mere feeling of retaliation or of getting satisfaction has no place in business.

Before resorting to the power of law it is well to ask the following questions:

- 1. Have all reasonable and peaceable efforts been made to induce the debtor to make payment?
- 2. Is the amount sufficient to warrant the expense involved in the legal process?
- 3. Has the debtor more property than the law allows him by way of exemption?
 - 4. What does the law exempt? (See Exemption Table.)

When all peaceable means have been exhausted and the debt is not paid, it then becomes necessary to collect it, if possible, by legal process.

If satisfied that the debt can be collected, then the account should be placed in the hands of a justice of the peace, unless it is larger than comes within his jurisdiction.

This amount varies in different States, as shown by the following table:

Limit of Jurisdiction with Justice of the Peace

The following shows the largest amount in the different States and territories which the justice of the peace, through his official position, can have jurisdiction over:

Alabama\$100 Arizona300 Arkansas300 California300 Colorado300	Louisiana \$100 Maine 20 Maryland 100 Massachusetts . 300 Michigan 300	Ohio \$300 Oregon 250 Pennsylvania 300 Rhode Island 100 South Carolina 100
Colorado 300 Connecticut" 100 Dakota 100 Delaware 100 Florida 100 Georgia 100 Idaho 300 Illinois 200 Indiana 200	Michigan. 300 Minnesota. 100 Mississippi. 150 Missouri. 250 Montana. 300 Nebraska 200 Nevada. 300 New Hampshire 100 New Jersey. 200	South Carolina 100 Tennessee 1,000 Texas 200 Utah 300 Vermont 200 Virginia 100 Washington 300 West Virginia 300 Wisconsin 200
Iowa 100* Kansas 300 Kentucky 50	New Mexico Ter 100 New York 100 North Carolina 200	Wyoming 100

^{*}By consent of parties, \$300.

When the amount comes within the jurisdiction of the justice he issues a summons, which the constable presents to the debtor, reading it to him if he can be found, which is called "serving the summons."

Form of Summons

The wording of this summons will be somewhat as follows;

The People of the State of —, to any Constable of Said County— GREETING:

You are hereby commanded to summon L. M. to appear before me at — on the — day of —, at — o'clock — M., to answer the complaint of R. L. for a failure to pay him a certain demand not exceeding —, and hereof make due return, as the law directs. Given under my hand this — day of —, 19—.

James Watts, Justice of the Peace.

In case the party is absent or refuses to hear the summons the constable may read it to some member of the family of ten years or upward and leave a copy of the same. A summons is usually served at least three days before the trial is to take place. Upon

the serving of the summons the debtor may pay to the constable the demand of the debt and costs, taking his receipt for the same, which will satisfy the debt and prevent all further costs.

The Judgment

If at the time set for trial both parties appear and are ready for the same, the justice proceeds with it and determines the matter in controversy. His determination is called the judgment. The judgment can be rendered if the defendant does not appear at the trial.

Demanding a Jury

Either party in a trial before a justice of the peace may demand a jury, and the justice is bound to grant the demand upon the deposit with him of the jury fees by the party making the demand. The jury may consist of either six or twelve men.

The Execution

The judgment being obtained, the plaintiff may now enforce payment. This process is called execution. It consists in a writ commanding the constable to seize sufficient of the property of the defendant, "which is not exempted by law," to satisfy the claim and costs and to sell the same and bring the money into the court to be paid to the plaintiff. The constable then proceeds to do this and if he succeeds in finding such property seizes it, sells it at auction, and brings the money into court.

Attachment

Cases may arise where the legal process by summons, judgment and execution works too slowly, and the dishonest debtor may get away before payment can be enforced by the creditor; or the debtor may secrete, conceal, assign or remove the property beyond the reach of the law. To prevent such evasion the law provides a short process to get possession of property owned by them; this is called attachment.

How an Attachment is Obtained

The causes justifying an attachment are various; the creditor must affirm by oath that the debtor intends to defraud him by removing his property and departing beyond the reach of the law. In the affidavit is stated the amount of the debt, that the same is just, is due, unpaid, and giving one or more reasons why the attachment should be issued.

Usually the attachment is not issued until the debt is due, but in some States it is issued before if it can be shown that the debt would probably be lost unless an attachment is secured at once.

The Creditor's Bond.—In order to secure the costs and the debtor against all damages in case the attachment is improperly issued the creditor securing the same must give a bond, usually double the amount claimed.

The Writ makes it the duty of the officer to at once seize sufficient property of the debtor to satisfy the claim (excepting such as is exempt from execution) and to hold the same until the plaintiff can get judgment and seize it upon execution. Property of the debtor in the hands of a third party may also be seized.

The Real Object of the Attachment is to hold sufficient property of the debtor to satisfy the debt until the creditor can get judgment. When the property has been seized the summons is served, and if the case is properly proved judgment is obtained in the ordinary way. After this the creditor takes out his execution, makes a levy upon the property attached, and out of the proceeds satisfies his debt.

Each State has its own attachment laws, and since officers of the law must be engaged to obtain the attachment there need be no difficulty in the details of the procedure.

Garnishment or Suing the Garnishee.—In the course of collection of debts it sometimes happens that while the defendant himself may have no property in his possession upon which an attachment can be made some other person may have in his possession property belonging to the debtor or may be indebted to him. In such cases the plaintiff can proceed against this third party, who is called the garnishee, just as against the original debtor, although in some States a certain amount of money is exempt and cannot be garnisheed.

Attaching the Body

If under an attachment the officer returns "no property found," but the plaintiff is convinced that the defendant has property concealed, with the intention of defrauding him, and believes he is in danger of losing his claim unless the debtor is held to bail, several States empower the justice to issue a capias for the arrest of the debtor. A capias is issued usually only as a last resort, when it appears that the claim can only be collected by arresting the defendant.

Persons Who Cannot Be Arrested

The constitution of the United States prohibits the arrest of members of Congress and electors while on duty, except for treason, felony and breach of peace. In many States the militia, while attending musters or while on a journey; so also attorneys and counselors at law, judges, sheriffs, and all other officers of the several courts, also witnesses and other persons necessarily attending court are exempt from arrest except for felony, etc.

Real Estate Held for Debt

When under an execution no personal property can be found with which to pay the debt and it is known that the debtor possesses real estate enough to meet the claim, then certain States allow the justice to certify to the clerk of the circuit court a transcript of the judgment. This, when filed by the clerk, becomes a lien upon the real estate of the debtor. The court can then issue an execution and the property be sold for payment of the debt and costs.

Right to Appeal

If all legal steps have been properly taken in a trial before a justice or jury and the decision is that the debtor must pay the claim, he can then appeal to the next higher tribunal, which is the circuit court, district court, court of common pleas or other.

Before an appeal is allowed the defendant must give a bond, signed by one or more responsible persons, to a sum twice the amount of the claim, to cover the debt and all costs in case he is beaten.

If the defendant loses his case also in this court then he can carry it to the supreme court of the State, where the matter generally ends, though the way remains open for him to appeal to the Supreme Court of the United States. A bond twice the amount of the debt and the costs accumulated by the successive trials up to this time is required before an appeal from one court to another is granted, as from the first.

When an Amount Beyond the Jurisdiction of a Justice is to be collected the case must be brought before the circuit court, district court, court of common pleas, or a court of similar character. There the clerk issues the summons, the sheriff or his deputy serves it and the case is usually tried before a jury of twelve men at the next term of Court.

Delay in Forced Collections

Since the defendant can promptly defend his case and if beaten appeal to a higher court, he can thereby delay payment of the original debt for one or more years. But as each appeal increases the costs they soon become heavy and but few persons are able or willing to bear them. A debtor will generally pay the debt in the earlier part of the prosecution, unless he believes himself wronged or for other reasons refuses to do so.

Cost of Collections by Law

The first questions that should properly be asked, before resorting to or before submitting to collections by law, are: What will it cost? Will it pay? The actual cost cannot definitely but only approximately be foretold, and only in so far as the amount of the fees are fixed by law.

If the amount and the intricacies of the case are such that it is thought best to employ a lawyer a day or two, his charges will probably range from ten to twenty dollars.

If the plaintiff gains the case the debtor must pay all the costs. If the justice or jury decides against the plaintiff, declaring no cause for action, then the plaintiff must pay the cost of the suit.

The following fees of an ordinary suit vary in the different States:

Docketing the suit\$ 0	.25
Issuing summons	.25
Constable for serving summons	.35
Each mile traveled by constable in serving summons	.05
Justice fee for entering up judgment	.25
For discharge of docket	,25
Fee of justice for hearing statement and giving decision 2	00.9
Total	40

Witnesses are allowed 50 cents a day. Say two witnesses\$ 1.00 Justice for issuing subpœna of witnesses at 25 cents
about
Total \$ 5.90
If tried by jury, each juryman is allowed 50 cents; 12
jurymen\$ 6.00
For entering verdict of jury
Constable for waiting on jury
Entering satisfaction of judgment
if settled there 12.65
If an attorney is employed, say fee
Total
If debtor does not settle, fee for execution
Fee of constable for serving and returning execution50
Advertising property for sale
Commission on sales, not exceeding ten dollars, 10 per cent,
if more 5 per cent; property sales say \$50, commission 2.50
Total cost of legal process ending in execution\$31.65

Total cost of suit involving say a debt of \$50.

If the case is settled without effecting the sale under execution, the cost connected with the execution is one-half of what is stated above. Add to this the time lost, to say nothing about the moral effect, and the question, "Will it pay?" is pretty well answered.

Exemption Laws of the Different States

Exemption laws are for the purpose of protecting those who are unable to pay their debts without causing distress to themselves and their families.

In many of the States debtors who desire to avail themselves in full of the provisions of the exemption laws are required to make a schedule of their personal property of every kind and character, including money on hand and debts due and owing to the debtor, and deliver the same to the officer serving the writ of execution. This schedule must be sworn to by the debtor.

Personal	Personal
State. Property Homestead	State. Property Homestead
Exempt.	Exempt.
Alabama\$1.000\$2,000	Montana\$2,500
Arizona 1,000 4,000	Nebraska 500 2,000
Arkansas 500 2,500	Nevada 5,000
California 5,000	New Hampshire 500
Colorado 2,000	New Jersey 200 1,000
Connecticut	New Mexico 500 1,000
Delaware 200	New York 250 1,000
Dist.of Columbia 300	North Carolina . 500 1,000
Florida 1,000 160 Acres.	North Dakota . 1,500 5,000
Georgia 1,600 or 1,600	Ohio 100 1,000
Idaho 5,000	Oregon 1,500
Illinois 400 1,000	Pennsylvania. 300
Indiana 600 or 600	Rhode Island. 300
Iowa 200. or 40 Acres.	South Carolina. 500 1,000
Kansas160 Acres.	South Dakota . 750 5,000
Kentucky 1,000	Tennessee
Louisiana Total, 2.000	Texas 5,000
Maine 500	Utah
Maryland 100	Vermont 200 500
Massachusetts 800	Virginia 2.000
Michigan 400 1 500	Washington 500 2,000
Minnesota 50080 Acres.	West Virginia . 200 1.000
Mississippi 2,000	Wisconsin 200 40 Acres.
Missouri 300 3,000	Wyoming 500 1,500

Note.—In many of the States it is impossible to place a fixed amount on personal property exempt. In the table above these States have no amount given in the personal property column.

The Time in which Debts are Outlawed

- 1. It is found necessary in all commercial countries to fix a limit of time in which debts hold good. It would not tend to sound business practices or fairness for a creditor to be allowed unlimited time in which to enforce the collection of a debt.
- 2. Statutes of limitation have therefore been enacted, the period of time varying, there being no natural boundary line.
 - 3. The range of time is from one year to twenty years.
- 4. In accounts it generally begins from the purchase of the last-item, and is renewed by every partial payment.
- 5. In case the debtor makes a written acknowledgment in a note, or papers of that character, the claim is renewed.

For the statutes of limitation in force in the different States, see title, Interest Laws and Statutes of Limitation.





RUSSELL SAGE

STOCK JOBBING

The practice to which the term "stock jobbing" is more particularly applicable, is that of dealing in stocks or shares by persons who possess but little or no property in any of the funds, yet who contract for the sale or transfer of stock at some future period at a price agreed upon at the time. Such bargains are called *time bargains*, and this practice is *gambling* in every sense of the word.

Wall Street, in New York City, is the principal scene of stock jobbing in the United States. The New York Stock Exchange is the dominant feature of this locality. Here the prices of stocks and securities are determined, and here men become millionaires or paupers in a day.

Big Profits and Big Losses.—Stock jobbing is carried on to an amazing extent, and is of this character: A agrees to sell to

B \$50,000 of bank stock, for instance, to be transferred in twenty days, for \$60,000. Now if the price of bank stock on the day appointed for transfer should be only 118 per cent, he may then purchase as much as will enable him to fulfill his bargain for \$59,000 and thereby gain \$1,000 by the transaction. Should the price of bank stock, however, advance to 125 per cent, he will have to pay \$62,500 for the necessary amount of stock and will thus lose \$2,500 by completing his agreement.

Advice of an Experienced Financier.—Russell Sage, one of the most successful financiers in the United States, gives the fol-

lowing advice concerning Wall Street speculations:

"The fact cannot be too strongly impressed upon the minds of intending Wall Street speculators that for every dollar gained in Wall Street there is a dollar lost, and as the people who gain the dollars are always well-known old-timers in the business, it follows, clearly, that the people who lose the dollars are the new-comers. It often happens, too, that in an unguarded moment an old-timer is ruined in Wall Street; but it is always the other old-timers who benefit by his collapse—the new-comers do not figure in the deal.

"'Experience' in Wall Street counts for nothing unless the experience of many years' duration, or is had as a friend of a

certain clique.

"No doubt the man who goes into Wall Street speculation with a \$1,000,000 capital may, with great prudence, be able to win \$1,000,000 or \$5,000,000 more after five or ten years. But he will lose from half to three-quarters of his original capital in acquiring the knowledge of the 'wire pulling' that will be necessary for him to be possessed of before he can begin to be making regular, permanent, steadily increasing gains. Exceptions have been extremely rare, and were the result of mere chance.

"As a rule, however, for a person with less than \$25,000 or even \$50,000 to go into Wall Street is sheer throwing away of money. I have seen thousands of men with capitals larger than that go down with the loss of every dollar. Some of them were men of exceptional shrewdness, too.

"I tried speculation, when, in 1874, I bought a seat in the Stock Exchange. But when I found out what the conditions

were, I simply got out at the first opportunity.

"I do not wish to be drawn into any controversy in the matter, so will not particularize; but the person who is thinking of going into Wall Street speculation in the hope of making money when he has learned what is popularly called 'the ropes' would do well to ponder what one writer has written on the subject:

"'Some brokers of the Stock Exchange simply bid the figures to win their bets which they have made with their dupes—are running a "brace" game. Pretending to trade in stock, they delude the speculating public with the idea that they bid stocks up or down according to conditions of trade, war news, and so on. In reality, their only object is to bid the figures against the lambs on the floor who bring in the money of the lambs on the outside. In the nature of things, that could be their only object. The business not being a trading in actual stock, but simply betting on figures, the only object of the thimble-riggers on the floor is to bid the figures so as to win their bets. Several shysters, acting in collusion, pretend to trade furiously with one another, their bids in these "wash" sales "washing" a stock up or down."

Life in Wall Street.—"The general public has an incorrect idea of the nature of the life of a Wall Street businss man. The speulators no doubt are compelled to live under conditions of unnatural excitement; but it is not so with the Wall Street operator who does not speculate—the man who buys stock with the object of improving its value, and retaining it. There is no more undue excitement in the life of a Wall Street business man than there is in the life of a wholesale dry goods dealer. The man who deals in money—that is what a Wall Street business man does—must be just as thorough a business man as the man who deals in merchandise.

"The wholesale grocer looks about the field before him, and discovers that by purchasing an agency in a certain section and spending some money in developing its resources he can make his general wealth so much larger; and so it is with all other dealers in merchandise. The Wall Street business man does not do differently. He simply examines the field before him, and his experience teaches him that if he buys out a lot of stock in a certain concern which is in great need of ready money, he can lend the money to that concern, and the result will be that the value of its shares will go up. Instead of selling this stock when it becomes valuable, as the public imagines he is always anxious to do, it is seldom that the Wall Street business man cares to part with it.

"The Wall Street Speculator differs from the Wall Street business man in this respect, in that after buying a certain stock he either cannot or does not do anything to make it more valuable except in the belief of the lambs by the bidding for it which he

prompts his agents to do. Then when he sells it at a higher figure the real truth of the matter is that the actual value of the stock has remained all the meanwhile in exactly the same place where the value was at the time the speculator originally purchased it. It is to persons such as the latter that fortunes are lost in Wall Street."

Bucket Shops are places which secure Stock Exchange quotations, or pretend to do so, and furnish persons of moderate means the same opportunities for gambling offered to wealthy speculators at the Exchange. Here anybody can gamble in futures by risking as small an amount as five or ten dollars, but his chances of winning out are about the same as if he had put up his money on a shell game or three card monte.

WAREHOUSING

Warehouses are divided generally into two distinct classes:

1. Bonded warehouses, under the control of the government.

2. Unbonded, or private warehouses.

Bonded Warehouses are buildings in which imported merchandise is stored until the importer makes entry for withdrawal for consumption and pays the duties, or until he withdraws the merchandise for reëxportation to a foreign country without paying the duties.

These warehouses are owned either by the government, or are private bonded warehouses, whose proprietors must obtain authority from the Secretary of the Treasury for receiving imported goods before the duties thereon are paid. owned by the government are under the entire control of the collector of the port, who assesses a charge at a fixed rate for the storage of goods, and this charge, with the import duty, becomes a lien upon them. The private bonded warehouses are required to be first-class, fire proof buildings, and to be used for no other business, and they must be approved by the Secretary of the Treasury before receiving any merchandise. A government officer is placed in charge, at the expense of the owner, and the business is conducted under provisions and requirements established by the government. The officer of the customs detailed to take charge of a bonded warehouse, and under whose supervision bonded goods are received and delivered from the warehouse, is called a bonded storekeeper.

Subject to order hereon, on payment of all charges and the surrender of this receipt properly endorsed. This Company will provide anny desired temperature, but will not be responsible for results. No. 3997 MONARCH REFRICERATING COMPANY 239-241-243-245-247-249-251-253-255-257-259-261 MICHIGAN ST. Received for storage from __ Subject to SERIES O. Articles Lot. Wh. Sec.

It is agreed that all loss ordamage to property occasioned by fire, water leakage rermin, ratage, brechage, frost, accidental or providental causes, rulo nonsurection or persistable property is at owners risk, losse meals and any class of goods, not property, hadeca at owners risk. Not responsible for strinkage investifiers.

Warehouse neceipts must accompany, delivery orders.

MONARCH REFRIGERATING COMPANY,

SEC'Y B.TREAS.

Form of Warehouse Receipt

Storage her Contract_ Net weight handed in Goods, wares and merchandise imported into the United States, subject to the payment of ad valorem duties, are required by law to be appraised at their "actual market value" in the foreign port at time of export. As it is frequently difficult to establish an actual market value in a foreign port, many goods being made only and expressly for foreign markets, and not sold nor offered for sale at the place of their manufacture or shipment, serious litigations often arise between the merchant and the government. This difficulty has led to the recognition by the commercial world of the distinctions, cash value, market value, and intrinsic value, although the laws name but one—the "actual market value."

In the United States the government warehouse system has been extended to other than imported goods. Thus spirituous liquors may be deposited in certain warehouses under the control of an internal revenue collector, and payment of the internal revenue taxes delayed until the liquors are withdrawn. Bonds are usually required of persons availing themselves of this privilege, and the liquors so stored are said to be in bond.

Unbonded Warehouses, or private storage houses, are common in all the large cities of the United States, and are mostly used for the storage of household goods. There are many, however, used exclusively for the storage of merchandise, some of which are known as cold-storage warehouses. In some States warehouses for the storage of grain, etc., are subject to State inspection and supervision.

The rates for storing bulky articles are usually fixed at so much per month, according to the amount of space occupied. The warehouseman is regarded as a bailee for hire, and must take ordinary care of the property placed in his custody. (See Bailments.)

Warehouse Receipts given by private warehouse companies are negotiable instruments and pass from hand to hand by indorsement, or they may be used with banks, etc., as collateral security for money borrowed. There is usually a provision in the receipt that its transfer by indorsement and delivery shall be a conclusive transfer of the property. Where this is the case the receipt is an acknowledgment of the warehouseman that the goods are actually in store, and he becomes liable for their value even if no such goods as described in the receipt have been stored with him.

TRADE AND COMMERCE

The Terms "trade" and "commerce," primarily, have the same meaning, only the latter is now generally restricted to the buying, selling, exchanging, etc., of commodities between different nations or States, while the former is applied indiscriminately to all commercial intercourse, whether domestic or international.

Trade is divided generally into two classes, wholesale and retail. Wholesale trade deals in goods by the piece or in large quantities, supplying retail dealers and middle men generally, while retail trade deals in small quantities and supplies goods directly to consumers.

The Wholesale Trade of a country is divided into four different kinds: the home trade, the import, or foreign trade of consumption, the export trade, and the carrying trade.

The Home Trade is employed in purchasing in one part of the same country and selling in another the produce of the industry of the country, and it comprehends both the inland and coasting, or that which is carried on both by land and sea.

The Import Trade is employed in purchasing foreign goods for home consumption.

The Export Trade is employed in connection with goods and produce sent to foreign markets.

The Carrying Trade is employed in transacting the commerce of foreign countries, or in carrying the surplus produce of one to another.

Commerce distributes the gifts of nature, balancing the deficiencies of one country with what is superfluous in another, creates a demand for labor, finds employment for wealth, and multiplies and cheapens the productions of every country.

Exports and Imports.—A quarter of a century ago the United States ranked fourth among the commercial nations of the world. To-day it stands first in the value of its exports. In a single fiscal year—that which ended June 30, 1898—the exports of the United States increased by a figure which represents a greater increase than that of England in twenty-five years. In 1800 the total value of exports of the United States was \$70,971,780, and in 1903 it had increased to \$1,420,141,679, which is over \$40,000,000 greater than the total value of exports of Great Britain for the same year.

Foreign Carrying Trade.—During the year 1903 the shipping in the foreign carrying trade that was entered and cleared at the various ports of the United States aggregated 62,409,831 tons.

Inland Carrying Trade.—In its railway commercial facilities the United States is preëminent. The total railway mileage of the world is 505,963, of which the United States possesses 180,657. This is 5,657 miles greater than the aggregate mileage of European railways.

Manufactures.—These unrivaled facilities for transportation have induced a marvelous growth of manufactures in the United States for consumption in all parts of the world. In 1870 the manufactures of the United States just about equaled those of Great Britain, while to-day they are two and a half times as great as the total value of British manufactures, and equal to those of Great Britain, Germany and France put together.

Customs Duties.—The taxes levied on imported goods are usually called customs duties.

Custom-Houses.—The place appointed by the government at ports of entry where vessels and merchandise are entered and duties upon imported goods are collected, and where vessels obtain their clearance and other papers, is called a custom-house; the collectors, appraisers, surveyors, naval officers, and their deputies, examiners, clerks at the head of divisions, inspectors, gaugers and weighers, but not subordinate clerks, are called custom-house officers, and are sworn to faithful service; the persons who act for merchants in the business of entering and clearing goods and vessels, and in the transaction of general business, are known officially as custom-house brokers.

A Custom-house Entry is a statement made in writing to the collector of the district, by the owners or consignees of the merchandise on board any ship or vessel, which they desire to land.

Bonded Goods.—Foreign goods are said to be bonded, when the payment of the duties is secured by a bond, or when warehoused in a government store or warehouse, and under the control of the collector of the port until entered for consumption and the duties are paid. (See Warehousing.)

When goods are shipped from a foreign port and destined for an interior point or other place in the United States that is not a port of entry, they first go to a port of entry and then are forwarded in bond to the point of destination. This trans-shipment is effected through means of a custom-house broker at the port of entry, to whom the invoice, bill of lading, and other shipping papers are sent.



WITH THE PRINCIPLES, RULES AND LAW GOVERN-ING BUSINESS TRANSACTIONS OF EVERY NATURE

CONTRACTS

A Contract is an agreement between competent persons, on sufficient consideration, to do, or abstain from doing, some certain act or acts within some certain time expressed or implied.

To Constitute a Valid Contract—one that can be enforced by law—five things are necessary: competent parties, sufficient consideration, mutual assent, lawful subject matter, and time of performance.

Parties Who May and Who May Not Make Contracts.—Until the contrary is shown, all persons entering into a contract are presumed to be competent to bind themselves by their agreement. Hence those who would resist the performance of a contract on the ground of legal incapacity must set up and prove the particular incapacity upon which they rely to avoid the contract.

Minors, insane persons, idiots, and persons deprived of their reason by intoxicants, are incapable of entering into contracts.

Married women, under the common law, are not competent parties to a contract. But by the statutes of most of the States a married woman is now empowered to enter into contracts regarding her own separate property, enter into business on her own behalf, or join in a business partnership with her husband.

Bound for Necessaries Furnished.—Though minors, insane persons, idiots, etc., are not, generally speaking, competent to enter into contracts, they are bound for necessaries furnished them. A husband is bound for necessaries furnished his wife, even if against his orders, if he fails to furnish them for her.

Corporations can enter into contracts, provided they keep within the limits prescribed by their charters. Anything attempted beyond those limits would be ultra vires, beyond their power, and void. Parol contracts made by a corporation's authorized agents within the scope of its chartered powers are express promises of the corporation. Like an individual, a corporation may be bound by implied contracts deduced by inference from corporate acts. See Corporations.

Consideration.—A contract without consideration is void at the option of the party against whom it is sought to be enforced. There is one exception to this rule. It does not apply to innocent indorsees and bona fide holders of negotiable papers. A promise is a good consideration for a promise.

It is not always necessary that the consideration be expressed in the contract; it is sometimes implied. Thus, when a contract is deliberately made, without fraud and with a full knowledge of the circumstances, any damage, suspension, or forbearance of a right, will be sufficient consideration. It is not necessary that the consideration should exist at the time of the promise, if it arise afterwards, in consequence of the promise.

Mistake.—A contract made under a clear mistake of fact is not binding; for instance, if A. sells to B. a horse, which both A. and B. suppose to be in A.'s stable, and at the time of the contract the horse is dead, the sale is void. But a mistake of law is binding, for every one is presumed to know what the law is.

Mutual Assent.—No contract is valid in law unless the parties agree to the same thing in the same sense. Where a person orders a certain quantity of goods, for instance, at a certain credit, and the merchant sends a less quantity at a shorter credit, and the goods are lost, the merchant cannot recover the price of them; for there was no agreement on the terms, and hence no contract.

Subject Matter.—The thing to be done or omitted is called the subject matter of the contract. If this is illegal in its character, immoral, or contrary to public policy, the law will not enforce the contract.

Among Contracts Contrary to Public Policy is that of a man binding himself not to exercise his trade or business; but if, for a valuable consideration, he engages not to exercise his trade in

a particular place, he is bound by his engagement, but he may exercise it elsewhere. A bond that the obligor shall never carry on, or be concerned in, a particular business, is void.

Time of Performance.—There must be a time, either expressed or implied, in which a contract is to be performed. Otherwise one party could postpone the execution of his contract indefinitely. Where no time is expressed, a reasonable time will be understood.

Formality.—Contracts of various kinds may be made verbally, others are required by law to be in writing. All contracts are either express or implied. Express contracts are where the terms are openly uttered at the time of making. Implied are such as reason and justice dictate, and which the law presumes every man undertakes to perform. For instance, if there is no stipulation as to the price, when one sells goods, or performs labor for another at his request, the law implies a promise to pay for such goods, or labor, so much as they are reasonably worth. It is also an implied condition of work and labor, that it be done in a suitable and workmanlike manner. But the law will never imply a promise against a party's declaration at the time.

Contracts That Must be in Writing.—The English Statute of Frauds has been substantially copied in nearly all the States. It provides that—in the following cases no agreement shall be legally enforcible unless the same, or some memorandum thereof, be in writing, and subscribed by the party to be charged therewith: 1. Every special promise of an executor or administrator to answer damages out of his own estate. 2. Every agreement made upon consideration of marriage. applies not to promises of marriage, but to promises to pay money, or to make a settlement of property, if the marriage is consummated. 3. Every agreement that by its terms is not to be performed within one year from the making thereof. 4. Every special promise to answer the debt, default, or misdoings of another. 5. Every contract for the sale of any goods, chattels, or thing for the price of ten pounds (\$50.00), or more, unless: (a) the buyer shall accept and receive part of such goods; or (b) the buyer shall at the time pay some part of the purchase money, or give something in earnest to bind the bargain. 6. Every contract for the sale of any lands, or any interest in lands.

Where a person has the benefit of another's services under a verbal agreement, and then successfully pleads the statute of

frauds, the other party may recover so much as his services have been worth.

Interpretation and Construction.—In construing contracts, the intention of the parties must govern; words are to be taken in their natural and obvious sense; when the intention is doubtful the context may be resorted to to explain ambiguous terms; the whole of the instrument is to be viewed and compared in all its parts, so that every part of it may be made consistent and effectual. Where the language of an agreement is plain and unequivocal, there is no room for construction, and it must be carried into effect according to its plain meaning.

Ambiguities in deeds or other instruments are generally interpreted against the grantor, or contractor.

Performance.—A person who undertakes to perform a job of work by special contract, must perform his contract before he is entitled to his pay. If a person is hired for six months, or other definite time, and leaves before the end of it, without reasonable cause, he loses his right to wages for the period he has served. But if he is dismissed without cause he can recover for the whole term—at its expiration. It is no sufficient cause for abandoning one's contract, that he was put upon work not contemplated at the time the contract was made, but if he is prevented by sickness from laboring during the stipulated period, he may recover for his services as much as his services were worth, for the time he labored.

Specific Performance.—The law side of the court cannot enforce the specific performance of a contract. It can only allow damages for the failure to perform, or for breach. On the equity side of the court, certain contracts may be enforced specifically. They most commonly relate to the sale of real property.

Rescinding.—In general, a contract cannot be rescinded, unless by consent of both parties, except in case of fraud. A party having a right to rescind a contract, must exercise the right within a reasonable time.

Where parties agree to rescind a sale once made and perfected without fraud, the same formalities of delivery, etc., are necessary to revest the property in the original vendor, which were necessary to pass it from him to the vendee. A contract required by law to be in writing cannot be dissolved by verbal agreement.

Tender.—A tender of payment does not bar, or extinguish the debt; for the debtor is still liable to pay it, but it bars the claim to subsequent damages, interest and costs of defense against the plaintiff. A debtor should tender the full amount of the debt with the interest and costs which have accrued.

Damages.—The general rule of law respecting the measure of damages is, that where an injury has been sustained, for which the law gives a remedy, that remedy shall be commensurate with the injury sustained.



HOW A CONTRACT SHOULD BE WRITTEN

Pen and Ink Should Be Used in writing a contract, but the use of a pencil will not render the contract invalid. The contract should be written in plain and unequivocal language, and the law does not in general require a formal contract drawn up with technical precision.

The Contract Should Be Dated, and care should be taken that the date be not a Sunday or a legal holiday, for in some States that would invalidate the contract.

Any Erasures or Interlineations made in the body of the contract should be specified in the margin or at the bottom as having been made before the contract was signed.

Any Material Alteration in the contract after it is signed, if

made by a party to the contract without the consent of the other party will discharge the contract.

Contracts should be prepared and signed in duplicate, triplicate, etc., according to the number of persons concerned in them. Each party should be furnished with a copy.

It is the presumption of the law that a person in making a contract intends to bind not only himself but his legal representatives. Such representatives may therefore sue or be sued on a contract, although not named in it.

Letters May Constitute a Contract.—If a letter containing an offer is answered by another, accepting it, the two letters taken together constitute the written contract. If an order for goods is sent and filled it is a written contract as far as the writer is concerned, but not as to the other party. A telegram in the same way may be a written contract.

General Form of Contract

CONTRACT, made and concluded this first day of June, A. D. 1904, by and between John Jones, of the city of Springfield, county of Sangamon, and State of Illinois, party of the first part, and Samuel Smith, of the same place, party of the second part, in these words: The said party of the second part contracts and agrees to and with the said party of the first part, to [here insert what is to be done]; and the said party of the first part contracts and agrees to pay unto the said party of the second part, for the same, the sum of fifty dollars, lawful money of the United States, as follows: the sum of twenty-five dollars when [here state the contingency on which the first payment is to be made], and twenty-five dollars when [here state the other contingency].

In witness whereof, the parties to these presents have hereunto set their hands and seals, the day and year first above written.

> JOHN JONES. [SEAL] SAMUEL SMITH. [SEAL]

Contract to Build

This Agreement, made the tenth day of May, A. D. 1905, between John Doe, of the city of Bloomington, in the county of McLean, and State of Illinois, party of the first part, and Richard Roe, of the same place, party of the second part.

Witnesseth, that the said party of the first part, for the consideration hereinafter mentioned, agrees to erect and build for the said party of the second part, a dwelling-house on the lot of land, numbered 91 Oak street, in the city of Bloomington aforesaid, and to furnish all the materials and perform all the work necessary to complete the same agreeably to the accompanying plans and specifications signed by the parties; and to deliver the said building, finished in every respect, to the said party of the second part, on or before the ... day of next.

In consideration whereof, the said party of the second part agrees to pay to the said party of first part, the sum of one thousand four hundred

dollars (\$1,400.00), as follows:—\$200 when the cellar is completed, \$200 when the frame is erected, \$200 when the outside is shingled and clapboarded \$200 when the lathing is completed, and \$600 when the building is finished; which sums shall be in full of all his claims and demands against the party of the second part, except as hereinafter provided.

And it is further agreed, that the said party of the second part may modify the before-mentioned specification, in any particular, without impairing its validity, or the validity of this contract in other respects;—provided that the sum to be allowed to either party for such alterations shall have been agreed upon by the parties hereto, and a full statement of the same made in writing, and signed by them, before the work to be affected by the change is commenced.

In witness whereof we have hereunto set our hands and seals, on the day and year first above written.

JOHN DOE. [SEAL] RICHARD ROE. [SEAL]

Executed and delivered in presence of



Contract for Hiring a Farm Hand

Know all Men by These Presents:

That Walter A. Clyde agrees to work faithfully for Wm. R. Manbeck, as a general laborer on his farm, and to do any work that he may be called upon to do in connection therewith, in the township of Lisle, County of Dupage, and State of Illinois, for the period of one year, beginning the first day of February next, 1904, for the sum of Thirty Dollars per month.

In consideration of the services to be performed, the said Wm. R. Manbeck agrees to pay Walter A. Clyde Thirty Dollars per month.

In witness whereof, the said parties have hereunto set their hands this first day of January, 1904.

WALTER A. CLYDE. WM. R. MANBECK.

Contract with a Clerk, or Workman

This Agreement, made this first day of January, A. D. 1904, by and between James Freeman, of the city of Chicago, county of Cook, and State of Illinois, party of the first part, and Alfred Willis, of the said city, county, and State, party of the second part.

Witnesseth, that the said Alfred Willis has agreed to enter the service of the said James Freeman as a clerk (or Journeyman) and promises faithfully, honestly and diligently to give and devote to him his time and labor as aforesaid, for the space of three years, from the first day of January, A. D. 1904.

In consideration whereof, the said James Freeman agrees to allow, and pay to the said Alfred Willis the sum of twelve hundred dollars (\$1200.00) per annum, in equal payments of one hundred dollars on the first day of each and every calendar month of the year, the first payment to be made on the first day of February, 1904.

Witness our hands,

JAMES FREEMAN.

ALFRED WILLIS.

Contract to Cultivate Land on Shares

This Agreement, made this first day of February, A. D. 1904, between Chas. N. Rohr, of the town of Colfax, county of Clinton, State of Indiana, and Henry Reamer, of Linden, county of Montgomery, State of Indiana, party of the second part.

Witnesseth that the said Chas. N. Rohr will, on or before the first day of March, break, properly prepare, and sow with wheat the forty acres belonging to, and lying north of the dwelling-place of the said Henry Reamer, in the town of Linden.

That one-half of the seed wheat shall be found by said Henry Reamer. That when said crop is in proper condition the said Chas. N. Rohr will cut, harvest, and safely house it in the barn of Henry Reamer. That he will properly thresh and clean the same. That he will deliver one-half of said wheat to the said Henry Reamer at his granary, on or before the fifteenth day of November, 1904.

Witness our hands and seals.

CHAS. N. ROHR. [SEAL] HENRY REAMER. [SEAL]

Signed, sealed, and delivered in presence of WM. MYERS, FRED HILLMAN.

ONE HUNDRED FACTS AND FORMS OF PROMISSORY NOTES

A Negotiable Note is a positive promise in writing to pay to a person therein named or his order, or to him or bearer, a certain sum of money, at a specified date, or within a time that is certainly ascertainable.

A Note Promising to Pay "At Sight" or "On Demand" is negotiable, for it is presumed that the party interested will see that sight is given or demand made.

If No Time of Payment Is Specified, "on demand" will be presumed to be intended.

Parties to a Note.—The person who promises is called the *maker*, and the one to whom the promise is made is called the *payee*. One who transfers a note to another by indorsing his name on the back is called an *indorser*, and the person to whom the note is transferred is called the *holder*.

Negotiation.—A note is negotiated when it is transferred from one person to another in such manner as to constitute the transferree the holder thereof; if payable to bearer it is negotiated by delivery; if payable to order it is negotiated by the indorsement of the holder, completed by delivery.

Transfer after Maturity.—A note may be transferred as well after maturity and in the same manner as before maturity, but the purchaser takes it at his own risk. It is subject in his hands to any defenses that may have existed against it in the hands of one holding it when it became due.

Holders in Good Faith.—A purchaser or holder of a note or other negotiable instrument who has acquired it in good faith, for a valuable consideration, in the ordinary course of business, when it is not overdue, without notice of dishonor, and without notice of facts which impeach its validity, has a title unaffected by those facts, and may recover on the instrument, even though it was without consideration between the parties originally, was subsequently released or paid, or was originally obtained by fraud, theft or robbery; but

In Case of Fraud, Theft or Robbery, if the instrument had never been given force by the maker by delivery and he was not guilty of negligence, there could be no recovery; in such case the note would never have had any legal existence. But the slightest negligence renders the maker liable, for instance, if the maker of a note after completing it retains it in his possession, no matter how securely, he is liable to a holder in good faith, or, as he is commonly termed, a bona fide holder, although it was placed in circulation through fraud, theft, or robbery.

Where a Holder in Good Faith Is Not Protected.—The defenses against which a bona fide holder is not protected are: 1. In

capacity of the maker of a note to contract; as where he is an infant, or a lunatic, or a person under guardianship. interdiction of a statute; as where a statute renders the contract void, for gambling or other illegality. 3. Where the party has never in fact signed the note as it stands; as where it was forged, or where it was subsequently altered, without the maker's consent or fault. 4. Where the maker was misled into signing something he was not intending, through imposition, and without negligence on his part, or where a person who is unable to read, or is blind, has a note falsely read to him, and he signs it believing it to have been correctly read, he will be protected. But where a person of ordinary faculties and knowledge is betrayed into signing a note, believing it an instrument of a different kind, he will be bound to bona fide holders, unless he has been free from negligence. If the maker with reasonable caution might have detected the fraud, the note will be good with a bona fide holder.

A Note Executed Under Duress—that is, under such fear or compulsion as to overcome the free agency of a reasonably firm man—will not be good in the hands of a bona fide holder; for there was no consent and no fault of the maker.

Uncompleted Notes.—If a note is executed and delivered with the amount left blank, the parties who sign or indorse it will be bound to a bona fide holder for any amount that may be filled in.

If a Party Entrusts His Signature on a Blank Paper to another to fill in some note, he will be bound to a bona fide holder though the other fills in an entirely different note than agreed. But if a person writes his name on a blank paper without any intention of having it filled out, and another obtains it and writes a note above the name, it will not be binding even in the hands of a holder in good faith.

Liability of Indorsers.—All the persons who have indorsed a note are liable for the amount due; but only one satisfaction can be recovered. If one indorser is obliged to pay the debt he can look to the others for their proportion.

An Indorser May Avoid Liability by writing "without recourse" on the back of the note with his signature.

To Make the Indorser of a Note Responsible, the note must be presented and payment demanded of the maker on the day it becomes due.

Protest.—A protest of a note is a formal statement by a notary that the note was presented for payment and payment refused. When a note is not duly paid on presentation, it is said to be "dishonored" and is taken to a *notary public*, who again presents it, and, if not paid, he notes its non-payment, and afterwards draws out a formal protest, that legal proceedings may be taken for recovering the amount due.

Notice of Protest.—The holder of a note may give notice of protest either to all the previous indorsers or only to one of them; in the latter case he must select the last indorser, and the last must give notice to the last before him, and so on.

Where notice of protest is duly addressed and deposited in the postoffice, the sender is deemed to have given due notice, notwithstanding any miscarriage in the mails.

Demand and Payment.—Notes payable on demand must be presented for payment within a reasonable time, in order to hold indorsers.

Where Days of Grace are Allowed by statute on notes, they are not considered due until the expiration of the days of grace. If a note is presented and payment demanded on the last day of grace, and payment refused, the maker is in default, and notice of dishonor may forthwith be given to the indorser. For days of grace allowed by the statutes of different States, see *Interest Laws and Statutes of Limitation*.

A Note Made Payable at a Bank and held there for payment until the usual hour for closing, need not be presented to the maker in person to bind the indorser. It may be protested, as in the case of drafts, immediately on the close of bank hours. Payment must be immediately demanded of the indorser if he resides in the same place; if he is a non-resident he must be notified at once by letter.

Presentment Not Necessary to Render Maker Liable.—Presentment for payment is not required in order to charge the maker of a note.

Sundays and Holidays —When the day of maturity falls upon Sunday or a legal holiday the note is payable on the next succeeding business day.

Place of Demand.—Where place of payment is specified in a note demand should be duly made at that place.

By Whom Demand May Be Made.—The holder of a note or any one acting for him may make the demand for payment and send notice of dishonor to the indorsers. Usually the holder or his agent notifies all the parties on the note. This is the most business-like, as well as the most prudent way, as it renders all parties responsible to him, and each responsible to each other in their order.

Extending Time of Payment by the holder releases the indorsers of the note, unless consent to such extension has been given by the indorsers.

Lost Notes.—If the maker should refuse to pay a note which has been lost, he may by law be compelled to pay it, but it would be necessary for the party collecting it to give bond, to protect the maker from all further claims, on account of the lost paper.

Proof Required.—It is necessary to prove that the note has been given by a certain party or parties, and up to date not paid. The maker of the note can compel the holder of the same to give evidence that the amount promised therein has not been paid.

The Finder of a Note, as of all other property, must make reasonable efforts to find the owner, before he is entitled to appropriate it for his own purposes. If the finder conceal it, he is liable to the charge of larceny or theft.

A Note Destroyed by Fire can be collected by proof of loss.

Interest.—A note which does not state on its face that it bears interest, will bear interest only from maturity.

If the Words "With Interest" are Included in a Note it draws the legal rate of interest from the date of making.

If the Note is to Draw a Rate of Interest Higher than the Legal, but not higher than the statute of the State allows, the rate of interest must be specified.

Death of a Holder.—After the death of a holder of a negotiable note, his executor or administrator may transfer it by his indorsement.

When Right of 'Action Expires.—The statute of limitations begins to run from the day the right of action accrues. See Interest Laws and Statutes of Limitation.

ALL THE DIFFERENT FORMS OF NOTES

Form of Non-negotiable Note

\$100.00 Woodstock, Ill., June 9, 1904.

Thirty days after date I p omise to pay James Jones One Hundred Dollars, value received.

JOHN DOBSON.

Negotiable Without Indorsement

\$100.00 Madison, Wis., Sept. 1, 1904.

Sixty days after date I promise to pay John M. Smith or bearer, One Hundred Dollars, value received.

GRANT WHITE.

Negotiable by Indorsement

\$100.00 Omaha, Neb., March 1, 1904. Ninety days after date I promise to pay to George Nelson or order,

One Hundred Dollars, value received.

RICHARD MILLS.

Payable at Bank

\$100.00 Chicago, Ill., May 2, 1904.

One year after date, for value received, I promise to pay Oliver Brown or order, at the First National Bank, One Hundred Dollars, with interest at six per cent per annum.

CHARLES JOHNSON.

On Demand

\$50.00 Denver, Colo., January 2, 1904.
On demand, for value received, I promise to pay to the order of John

EDWARD JAMES.

Accommodation Note

[N. B.—The maker of an accommodation note (one for which he has received no consideration, having lent his name or credit for the accommodation of the holder) is not bound to the person accommodated, but is bound to all other parties, precisely as if there was a good consideration.]

\$100.00 Toledo, O., March 10, 1904.

Sixty days after date I promise to pay to the order of Almer Wilson, One Hundred Dollars, at the First National Bank, without defalcation.

Credit the drawer,)

OWEN YATES.

ALMER WILSON.

Riley, Fifty Dollars, with interest.

To One's Own Order

\$100.00 Memphis, Tenn., April 3, 1904.
Sixty days after date I promise to pay to my own order. One Hundre

Sixty days after date I promise to pay to my own order, One Hundred Dollars, value received. Interest at seven per cent.

MARION ADAMS.

By Married Woman

\$200.00 Rochester, N. Y., Nov. 9, 1904.

For value received, I promise to pay John Jackson, or order, ninety days after date, Two Hundred Dollars, with interest. And I hereby charge my individual property and estate with the payment of this note.

(Mrs.) Mary H. Jones.

By Person who Cannot Write

\$50,00

Alton, Ill., Oct. 8, 1904.

For value received, I promise to pay to the order of William Warren, Fifty Dollars, with interest at six per cent.

his

EDWIN MORRIS, Witness

Louis X Barber.

Payable in Merchandise

\$100.00

Springfield, Mass., May 3, 1904.

For value received, I promise to pay Daniel Ward, or order, One Hundred Dollars in merchantable wheat, at the current price.

JASPER NOYES.

Collateral Note

\$300.000

Three Oaks, Mich., Aug. 1, 1904.

Sixty days after date I promise to pay to the order of John Jacobson, Three Hundred Dollars, without defalcation, for value received. Interest at six per cent.

Having deposited United States Bonds of the nominal value of Four Hundred Dollars, which I authorize the holder of this Note, upon the non-performance of this promise at maturity, to sell, either at public or private sale, without demanding payment of this Note or the debt due thereon, and without further notice, and apply proceeds, or as much thereof as may be necessary to the payment of this note, and all necessary expenses and charges, holding myself responsible for any deficiency.

MARTIN FIELD.

Judgment Note-Common Form

\$100.00

New York, January 1, 1904.

Three months after date, I promise to pay Paul Jones, or order, One Hundred Dollars, with interest at the rate of seven per cent per annum, from maturity until paid, without defalcation. And I do hereby confess judgment for the above sum, with interest and costs of suit, the release of all errors, and waiver of all rights to inquisition and appeal, and to the benefit of all laws exempting real or personal property from levy and sale.

LOUIS MARX. [SEAL]

Judgment Note-"Iron-Clad" Form

\$500.00

Tacoma, Wash., June 2, 1904.

One year after date, for value received, we promise to pay to the order of John L. Routt, Five Hundred Dollars, negotiable and payable at the First National Bank of Tacoma, without defalcation or discount, with eight per cent interest_per annum from date until paid, both before and after judgment, payable in U. S. gold coin; and if suit be instituted for the collection of this note we agree to pay Fifty Dollars attorney's fee. If the interest be not paid as herein stipulated, the legal holder of this note may declare the principal due, and proceed by law to recover both principal and interest.

HENRY SMITH, JOHN SMITH.

Judgment Note, with Waiver and Power of Attorney

\$600.00

New York, June 1, 1904.

Two months after date, I promise to pay to the order of William Eddy Six Hundred Dollars, at the National Park Bank, for value received, with interest at seven per cent per annum, from maturity until paid.

EDWIN LITTLE. [SEAL]

KNOW ALL MEN BY THESE PRESENTS:

That I, the undersigned, am justly indebted to William Eddy, upon a certain promissory note, of even date herewith, for six hundred dollars, value received, with interest at the rate of seven per cent per annum, from maturity until paid, and maturing August 1st, 1904.

Now, therefore, in consideration of the premises, I do hereby make, constitute, and appoint John Bright, or any attorney of any court of record, to be my true and lawful attorney, irrevocably for and in my name, place, and stead, to appear in any court of record, in term time or in vacation, in any State or Territory of the United States, at any time after said note becomes due, to waive the service of process, and confess judgment in favor of the said William Eddy, or his assigns, upon said note, for the amount thereof and interest thereon, together with costs and twenty dollars attorney's fees; and also to file a cognovit for the amount thereof, with an agreement therein, that no proceeding in error or appeal shall be prosecuted, or bill of equity filed to interfere in any manner with the operation of said judgment, and also to release all errors that may intervene in the entering up of said judgment or issuing execution thereon; to waive all benefits which I may be entitled to by virtue of any homestead, exemption, appraisement, or valuation law, now or hereafter in force, wherever such judgment may be entered or enforced, hereby ratifying and confirming all that my said attorney shall or may do, by virtue hereof.

Witness my hand and seal this 1st day of June, 1904.

EDWIN LITTLE. [SEAL]

Joint Note

\$200.00

Cairo, Ill., March 30, 1904.

Two months after date, we promise to pay to the order of Albert Sloan Two Hundred Dollars, value received.

JACOB SCOTT, JAMES ATKINS.

Joint-and-Several Note

\$500.00

Newark, N. J., March 6, 1904.

Six months after date, for value received, we jointly and severally promise to pay Hiram Davids or order, at the First National Bank, Five Hundred Dollars, with interest.

RICHARD MARK, JAMES HACKETT.

Example of How This Note Should Be Written.

INDORSEMENTS OF NOTES

Definition.—An indorsement is a writing on the back of a note or other written instrument.

What is Sufficient.—Though it is usual and better to write the indorsement in ink on the back of a note, it is legally sufficient if written with either pen or pencil upon any part of the instrument, or upon a paper attached thereto. The signature of the indorser, without additional words, is a sufficient indorsement.

Kinds of Indorsements.—An indorsement may be either special or in blank, and it may also be either restrictive, qualified, or conditional.

An Indorsement in Blank specifies no indorsee, and an instrument so indorsed is payable to bearer, and may be negotiated by delivery. (See Form 1.)

A Special Indorsement (sometimes called a *full* indorsement) specifies the person to whom or to whose order the instrument is to be payable; and the indorsement of such indorsee is necessary to the further negotiation of the instrument. (See Form 2.)

A Qualified Indorsement constitutes the indorser a mere assignor of the title to the instrument. It may be made by adding to the indorser's signature the words "without recourse," or any words of similar import. Such indorsement does not impair the negotiable character of the instrument. (See Form 3.)

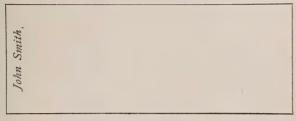
A Conditional Indorsement is one that involves some condition. A party required to pay the instrument may disregard the condition, and make payment to the indorsee or his transferee, whether the condition has been fulfilled or not. But any person to whom an instrument so indorsed is negotiated will hold the same, or the proceeds thereof, subject to the rights of the person indorsing conditionally. (See Form 4.)

A Restrictive Indorsement expressly confines the payment to some particular person or purpose. (See Form 5.)

Partial Payments.—When money is received on a note, the amount and date of receiving should be plainly vritten on the back of the paper. (See Form 6.)

FORMS OF INDORSEMENTS

Indersement in Blank



FORM 1

Special Indorsement

to the order ses Hill. John Smith.			
Pay to of James Jo		,	

FORM 2

Qualified Indorsement

-		 	 	
1	. * .			
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Ł	t. 0.2			
1	74 2			
1	2. 6.6			
1	23 0			
ı	000			
1	to John Jay, der, without se. John Smith.			
ı	0,2 : 2			
1	2 set			
ı	757,			
1	Pay to John Jay, order, without ourse. John Smith.			
ł				
١	Pay to order recourse.			
1	0 4			
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FORM 3

Conditional Indorsement

to James or order, you receive from me not v before ma-	
to or you from befo	
Pay Jones, unless notice for pay turity.	
7222	

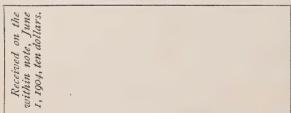
FORM 4

Restrictive Indorsement



FORM 5

Partial Payment Indorsement



FORM 6

An Order is a written request or direction for the payment of money or delivery of goods to a person therein named, the same to be charged to the person making the request.

Orders for the payment of money are negotiable if made payable to order or to bearer, but the person on whom they are drawn is not under obligation to pay them, unless they have been accepted, for an order partakes of the nature of a draft.

FORMS OF ORDERS

For Money

\$500.00 Chicago, Ill., March 10, 1904.

Mr. Richard Foss: Please pay to William Mason, or bearer, Five Hundred Dollars, on my account.

Thomas Fell.

For goods to Value of Certain Amount

Columbus, O., April 1, 1904.

Messrs. Bronson, King & Co.: Please deliver to the bearer, David
Swing, such goods as he may desire, to the value of One Hundred Dollars,
and charge same to my account.

George H. Thomas.

For Goods Stored

Richmond, Va., Sept. 1, 1904.

Messrs. Smith, Jones & Co.: Please deliver to the bearer, E. H. Van
Oven, Six Barrels of Apples, stored by me in your warehouse.

J. L. Spalding.

DUE BILLS

A Due Bill is a formal written acknowledgment that a certain amount is due to the person therein named. It may be payable in money or in merchandise. It is not transferable, and draws no interest unless specified therein.

FORMS OF DUE BILLS

Payable in Money

\$50.00 Racine, Wis., July 2, 1904.

Due William Macey, on demand, Fifty Dollars, value received.

John Knox.

Payable in Merchandise

\$100.00 Indianapolis, Ind., Sept. 2, 1904.

Due Charles H. Adams, for services rendered, One Hundred Dollars, payable on demand, in merchandise, at my store.

WILLIAM JOHNSON.

RECEIPTS

RULES FOR WRITING ALL KINDS OF RECEIPTS

What a Receipt Is.—A receipt is an acknowledgment in writing, signed by the person receiving, that certain personal property (money or goods, or both), has been received.

A Complete Receipt requires the following statements: That a payment has been received: the date of the payment; the

amount or article received; from whom received, and if for another on whose behalf payment is made; to what debt or purpose it is to be applied; by whom received, and if for another, on whose behalf it was received.

Kinds of Receipts.—Receipts are divided generally into three kinds: Receipts in Full, Receipts on Account, and Receipts to Apply on Particular Accounts.

Every Receipt Should Show whether payment is made in full, on account, or on what particular account where there are more

than one between the persons.

How an Agent Should Sign.—An agent should sign his principal's name and then write his own name underneath, prefixing the word "by," thus:

John Smith, [principal] by Thomas Jones, [the agent.]

Receipt for a Note Not Necessary.—It is not necessary to take or give a receipt when a note is paid, as the instrument itself becomes a receipt.

Mistake or Fraud.—A receipt given under error or mistake of fact, or obtained through fraud, is void.

FORMS OF RECEIPTS

Receipt in Full

Clinton, Ill. March 10, 1904.

Received from Randolph Pike, Two Hundred and Fifty-three Dollars, in Full of All Demands.

CHARLES JOHNSON.

Receipt on Account

Davenport, Iowa, July 1, 1964.

Received from Hiram Powers, One Hundred and Seventy-five Dollars, on account.

CLARENCE WHITE.

Receipt on Particular Account

Carson City, Nev., Aug. 1, 1904. Received from Abner Oglesby, One Hundred and Ninety-ñve Dollars, to apply on hire of horse.

MARSHALL STRAIT.

Receipt for Rent

Ottumwa, Iowa, May 1, 1904. Received of William Lawrence, Thirty Dollars, in full for rent of residence at 96 Adams Street for the month of May.

JAMES WALTERS,

Per WILLIAM STOUT, Agent.

100 100

Example of How a Receipt "in Full" Should Be Written

person to whom the receipt or note is given. In writing any receipt or note write the amount of same on a separate line following the name of the



Receipt for Purchase of a Horse

Received from John Meyer One Hundred and Fifty Dollars for one gray mare, guaranteed to be only four years old, gentle, quiet to ride or drive.

F. M. SCHULTZ.

Receipt for Interest

St. Paul, Minn. Sept. 9, 1904.

Received from James E. Harter One Hundred and Twenty Dollars, for interest to Sept. 1, 1904, on his Bond and Mortgage; receipt to be acknowledged also on the bond.

A. L. MERTON, Executor.

Rate, 7%. Time, — Months, — Days.

Ring, and one Rifle.

Receipt for Property

Elmira, N. Y., Nov. 10, 1904.

Received from W. L. Peterson the following enumerated articles to be held in trust for him and returned on his demand: One Bicycle, one Gold

EDWARD PARKS.

Receipt for Money Paid on Lost Note

\$1,000.00 Lincoln, Neb., April 20, 1904.

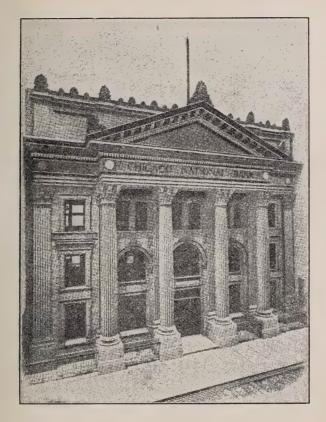
Received of Charles J. Morrison one thousand dollars, in full payment for a certain note given by said Chas. J. Morrison, dated October 15, 1903, calling for one thousand dollars; which said note is lost, destroyed, or mislaid, and this receipt is a guarantee against future demands on account of said note.

SAMUEL W. Goss.

N. B.—Better never lose a note.

Warehouse Receipt

(For form of warehouse receipt and a statement of the law regarding them see title Warehousing.)



BANKS AND BANKING

Brief History of Banks.—The name "bank" is derived from the Italian word banco, a bench; the early Italian banks being in the habit of transacting their business on benches or tables in the market-places of the principal towns.

The First Banking Institution of Importance was the Bank of Venice, which was established in 1171. The Bank of Genoa was projected in 1345, but did not go into full operation until 1407. The Bank of Barcelona was established in 1401, and was the first to institute the system of negotiation of bills of exchange. The

Bank of Hamburg was established in 1619, the Bank of Rotter-dam in 1635, the Bank of Stockholm in 1688, the Bank of England in 1694, the Banks of Berlin and Breslau in 1765, and the Bank of North America (by Robert Morris, at Philadelphia) in 1782.

The National Banking System of the United States was organized in 1863, prior to which all banks of issue and deposit were chartered by the several States, and in 1857, 1,400 of these State institutions were in existence.

Different Classes of Banks.—Banks are divided generally into five classes: of deposit, of discount, of circulation, of exchange, and savings banks. Taking them separately, they may be characterized as follows:

Banks of Deposit receive money to keep for the depositor until he draws it out, by checks payable to himself or to others. A person who desires to make a single deposit, to be withdrawn in the same amount, receives from the bank a *certificate of deposit*. This is payable at any stated time or on demand, and may bear interest.

Banks of Discount are occupied in discounting promissory notes and bills of exchange, or in lending money on security. Almost all banks have a department embracing these features.

Banks of Circulation issue bills or notes of their own, intended to be the circulating currency or medium of exchange, instead of gold and silver. The notes or bills of the National Banks are guaranteed by the Government, which holds as security bonds belonging to the bank to a still larger amount than their issue of bills, or, as commonly termed, their "circulation." The Government also retains a five per cent fund for immediate redemption.

Only the National Banks issue a circulation, because a tax of ten per cent would be levied upon any kind of circulating notes other than those issued by the Government.

Banks of Exchange receive money on deposit, and, instead of paying it back to the depositors, make payments by drafts on other banks. They keep money on deposit at the principal trade centers; thus money can be sent to different points at small expense and without risk. They charge one who desires to remit, a small amount for their services, and sell him their draft on the place to which the remittance is to be sent.

Savings Banks receive in trust or on deposit small sums of money at a moderate rate of interest. These sums generally are

BANKING

the savings of laborers from their earnings, and are thus deposited for profit and safe keeping.

At the end of a certain fixed time the interest due is added to each depositor's account. These interest terms vary with different banks, being one, three, or six months.

Each depositor is furnished with a book showing his deposits from time to time and what he has drawn out. When settling, the depositor is allowed no interest on the last deposit if it has not been in the bank for a full interest term.

NATIONAL BANKS

Why So Called.—In 1863 a national law was passed in accordance with which banks might be organized and conducted alike throughout the country. Banks formed under that and subsequent laws of Congress are called National Banks, for the reason that they are organized under national laws and their notes secured by national obligations.

How Organized.—Any number of persons, not less than five can enter into articles of association for the formation of a national bank. Such articles must specify in general terms the object for which the association is formed, and are signed by those associating and forwarded to the Comptroller of the Currency.

Requisite Amount of Capital.—The capital stock of a national banking association is divided into shares of \$100 each, and in cities of 50,000 population or over, no association can be organized with a less capital than \$200,000. In cities and towns of 6,000 population, and up to 50,000, a capital of \$100,000 is required; in towns of from 3,000 up to 6,000, \$50,000; and in towns not exceeding 3,000, \$25,000.

Shares of the Bank Stock.—The capital stock is divided into shares of \$100, and is transferable on the books of the association.

Payment of Stock.—At least 50 per cent of the capital stock must be paid in before business can be commenced, and the balance at the rate of at least 10 per cent a month.

Directors must not be less than five in number. Every director must own at least ten shares of the capital stock.

Deposit of Bonds.—Every association before it can circulate notes, must transfer and deliver to the Treasurer of the United States any interest-bearing United States registered bonds, to an amount, not less than \$30,000, and not less than one-third of the

capital stock paid in. These bonds are kept on deposit by the United States Treasurer.

Bank Officers and Employees.—The stockholders of an incorporated bank elect a Board of Directors, who manage its affairs. These elect a President, one or more Vice-presidents and a Cashier. The Cashier is the executive officer of the bank and its interior management. He is assisted by a number of employees. The principal ones are the Paying Teller, and the Receiving Teller, who are at the head of the debit and credit departments; the Note Teller, the Discount Clerk, the Collection Clerk, the Bookkeepers, each in charge of certain ledgers; Assistant Tellers, Assistant Bookkeepers, Check Clerks, and Messengers.

Safety of Currency and Deposits.—Owing to the fact that a National Bank can issue notes only to an amount equal to the par value of Government bonds which the bank has deposited in the United States Treasury to secure their payment, it is impossible for the holder of national bank notes to suffer loss by reason of the bank's suspension or failure.

To insure the safety of deposits in National Banks, the law provides for a rigid system of periodic inspection by bank examiners appointed by the Comptroller of the Currency. But no perfect system has yet been devised that will effectually guard against the dishonesty of managing officers of the banks. Sometimes several banks are presided over by the same individual, and when an examination of one of the banks is to be made, he may cause funds from the other banks of which he is president to be transferred to the bank which is under examination, in sufficient amount to cover up any existing deficiencies. In this way the fact that funds of the bank have been embezzled by the bank officers, or diverted into the channels of speculation, remains undetected. most cases the opportunity for the embezzlement or diversion arises from the inefficiency or negligence of the bank directors, and in nearly every instance where loss to depositors has occurred it might have been prevented had the directors given ordinary attention to their duties.

Banking Business.—The business of banking consists in dealing in money and credit. The following are some of the branches of this business: Collection, Discount, Deposits, Circulation, Exchange, Loans, Remittance, Investment and Agency. Some of these branches have already been considered under the sub-heading Different Classes of Banks.

BANKING 147

Collection is the opposite of remittance. Banks receive drafts or checks payable at distant points. These are presented at the places of payment. There are left with the banks, for collection previous to maturity, notes, time drafts, and bills of exchange.

Discount is paying to a person the proceeds of a note or other paper not yet due, deducting from it the interest till maturity. As the sum received is not the full amount of the paper, the borrower really pays more than the nominal rate of interest. See Bank Discount.

Loans.—Bankers receive money not only for safe keeping, but they loan out the greater part of it at a higher interest than they pay their depositors. Loaning money is as much a part of their business as the receiving of deposits.

Investments.—With money not otherwise employed banks purchase various securities, both for the income to be derived from them and for the profit to be realized from their sale. The chief object of a savings bank is the collective investment of small sums.

Agency.—Many banks act as financial agents for their customers, investing their money in various ways.

Clearing Houses

The magnitude of the business of exchanges makes it necessary in large cities, where there are many banks, to have an establishment known as the clearing house, to which each bank connected with it sends every day in order to have its business with the other banks adjusted. Each bank in its daily dealings receives many bills of other banks, and checks drawn on them, so that at the close of the day's business every bank has in its drawers various sums due to it by other banks. It is, in like manner, the debtor of other banks which have received its bills and checks. These sums due by and to the banks among themselves are at the clearing house set off against each other and the balances paid or received.

A Bank Account

Importance of Keeping.—The keeping of a bank account is a matter of great convenience as well as pecuniary benefit to business men and women. Where considerable business is done, money is constantly accumulating, which, when deposited in a reliable bank, is more secure from burglary than elsewhere. Sometimes money may be lost through robbery or failure of a bank, but of all losses to which business men may be exposed that by failure of banks is the least.

How to Open.—One wishing to open an account with a bank should have some one who is acquainted with the bank officials give him an introduction at the bank. If the bank cashier is satisfied that all is right, he will have the prospective depositor write his name in the "Signature Book," so it will be recognized by the bank officials when appearing on checks signed by the depositor He is then given a deposit ticket, and proceeds to make his first deposit.

The Deposit Ticket

The **Deposit Ticket** is a blank form which the customer fills out so as to show the date, the amount and kinds of funds deposited.

DEPOSIT TICKET

Deposited in First National Bank By Wm. King	T.O.O. 4
Checks, Chas. Howard	\$700 50 75 00 30 50 \$806 00

The Pass Book

If money is deposited in a bank to remain there for an indefinite time, the depositor receives a certificate of deposit, but if he wishes to draw out frequently the banker furnishes him a pass book in which are entered the date and the amount of deposits. The opposite page shows the amount drawn out. From time to time they are balanced, showing the amount of deposit there is in the bank.

Dr. Fin	rst Nationa	l Bank in	account with	Wm. King	r Cr.
" 15 " 20 March 2	To cash	\$ 900 00 700 00 450 00 200 00 \$2,250 00 \$ 750 00	1904 Feb. 12 " 18 25 March 2	By check	\$ 250 00 300 00 450 00 500 00 750 00 \$2,250 00

The Check Book

The Check Book contains the blank orders or checks, with a margin on which to write date, amount and to whom the check is given. When filled out the check is taken to the bank, while the memorandum remains in the book.

No. 1.

Date, Feb. 12, 1904.
Favor of John Jones for Merchandise.

\$250.000

No. 1.

Chicago, Feb. 12, 1904.
FIRST NATIONAL BANK
Pay to John Jones, or order, Two
Hundred and Fifty \$\frac{0.0}{100}\$ Dollars.
\$250.000

Wm. King.

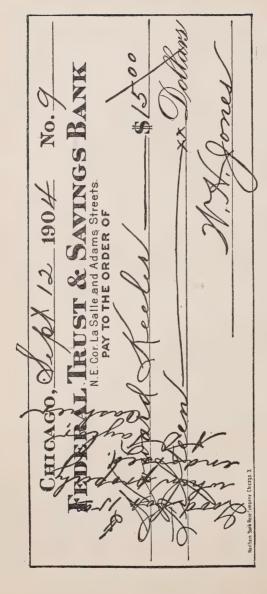
Checks

A Written Order on the Bank directing a certain amount of money to be paid to a person named, or to his order, or to him "or bearer," or simply to "bearer," is called a check. This is the simplest form of negotiable paper. A check requires no set form of wording; any properly dated demand upon a bank, by a depositor, correctly signed, is a check and will draw the money.

When Negotiable.—A check made payable to "bearer" is negotiable, and is payable to any one presenting it, and so is a check that is made payable to some one "or his order," after the payee has written his name upon the back.

Forged Checks.—Some forgers can imitate a signature so closely that even the one whose name is forged is not able to distinguish it from his own, and can only swear that he did not make out the check. The responsibility of detecting the forgery is thrown upon the teller. The bank pays every check at its own risk. The person whose name has been forged is not to rectify the forgery, because that would be shielding and encouraging crime.

Raised Checks.—To alter the writing and the figures of a check so that it will call for more money than the drawer gave instructions to pay is called raising the check. To prevent this, care should be taken to always fill in the empty spaces with lines. Use words instead of figures. If a raised check is paid by the bank, it can only charge the depositor with the amount for which he himself made out the check, unless he was grossly negligent in giving the amount to be paid. The drawer must take reasonable precaution to protect his check from being raised.

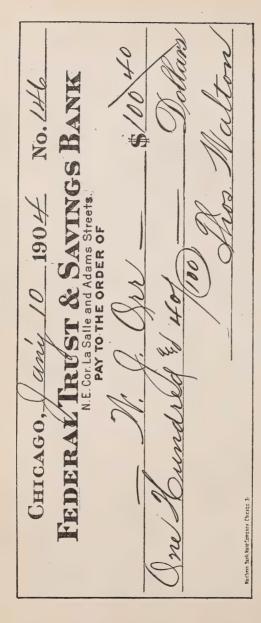


mentioned to his credit in the bank, and the bank guarantees its payment. The bank officer writes Certified Checks.—Certifying means that the person drawing the money has funds to the amount across the face "Certified," also the date and his signature; or the words "Good, when properly indorsed," and his signature,

#06I	DOLLARS
UNION TRUST COMPANY	2 x 40/00 ml John
No. 15 CJ UNION T	A C H.O. Andrew San Westerper 7:1704 3

Raising a Check

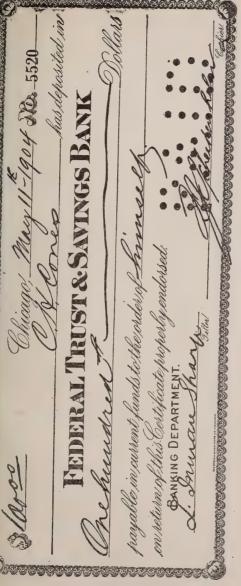
We herewith show a form that could easily be raised to One Hundred and Sixty Dollars by writing "One Hundred" before the word "Six" and adding "ty" to it, putting the figure "1" before the figure "6" and a cipher after it. In the same way it might be raised to "Ninety Six," 'Sixty" or "Sixteen" Dollars.



Check Payable to "The Order of"

This is the safest form of check. A check payable to "Bearer" can be cashed by any one.

A check payable to "John ---, or order," may have the word order struck out and "bearer" written instead. To write a check properly, begin close to the left-hand end to write the amount, filling what space may be left on the line with the amount of the cents, if any, and a stroke of the pen. The amount in figures should be written close to the dollar sign.



Certificate of Deposit

Certificates of deposit are given by banks for money deposited with them for a short time when the depositor has no regular account at the bank.

They may be endorsed and used as checks.

When strangers receive certificates of deposit the bank usually requires them to leave their signatures in order to insure payment to the proper persons, when the certificates are returned. Always Keep the Stub of Your Check Book, and in issuing a check always fill the stub out first.

In Presenting a Check to the Bank for payment, always write your name on the back before handing it in.

Giving a Check is No Payment of an indebtedness unless the check is paid.

The Death of the Maker of a check before presentment to the bank renders the check null and void, but in some States the statute provides that a check may be paid by the bank within a limited time after the death of the maker.

Payment of a Check may be Stopped by subsequent order to bank by maker before presentment of check.

When Sending a Check Away from your own town or locality always have it certified, as this renders it easier for the person to whom you send it to get it cashed.

OTHER FORMS OF CHECKS

Payable to Bearer

\$250.00 Akron, O., March 4, 1904. Cleveland National Bank, pay to E. J. Williams, or bearer, Two Hundred and Fifty Dollars.

R. M. ATWOOD & Co.

Payable to Order

\$125.40 St. Paul, Minn., Oct. 1, 1904. Commercial State Bank, pay to R. L. Holcomb, or order, One Hundred and Twenty-five and $\frac{1}{100}$ Dollars.

W. H. UNGER.

Payable to Yourself

\$50.00 Frankfort, Ky., Nov. 10, 1904. Frankfort Exchange Bank, pay to myself Fifty Dollars.

E. J. LANG.

INDORSING CHECKS

How Indorsement Should be Written.—Write the indorsement across the back, not lengthwise, of the check.

Each Successive Indorsement should be written under those that precede it.

In Depositing a Check, write across the back "For Deposit," and below this your name. Checks thus indorsed can only be deposited, and should they be lost on the way to the bank the finder cannot use them.

Merely Writing Your Name on the Back is a blank indorsement, and signifies that it has passed through your hands and is payable to bearer, any one into whose hands it may come.

In Order to Make Check Payable to some Particular Person, write: Pay to the order of (person's name), and sign your name

Do not Send Away a Check Indorsed in Blank, but make it payable to the person to whom you send it. Then if lost it cannot be paid to any one else.

A Person must Indorse his Name as it is Written in the check. A check drawn payable to W. King, cannot be indorsed Wm. King. If drawn payable to Rev. W. King, it should be so indorsed, as bankers are very particular to have the name of the payee as given on the face of the note exactly reproduced in the indorsement.

If the Spelling of the Name on the Face is Wrong, indorse it in that way and then write it underneath correctly.

Responsibility of Indorsers.—The following table shows the relative responsibility of each indorser. Each indorser is responsible to the one below him.

 _				
	In a note.	In an unaccepted draft or uncertified check.	In an accepted draft.	In a certified check.
2. 3.	Maker. 1st Indorser. 2nd Indorser. 3rd Indorser. Etc.	1. Drawer. 2. 1st Indorser. 3. 2nd Indorser. 4. 3rd Indorser. Etc.	1. Acceptor. 2. Drawer. 3. 1st. Indorser. 4. 2nd Indorser. Etc.	1. The Bank. 2. 1st Indorser. 3. 2nd Indorser. 4. 3rd Indorser. Etc.

FORMS OF INDORSEMENTS When Presented for Payment

W. King.		
	/	

When Transferred

Pay to the order of S. E. Gross.			
y to the E. Gr.			
Pa of S.			

When Deposited



BANKING RULES

- 1. Make your deposits in the bank as early in the day as possible, and never without your bank book.
- 2. Always use the deposit tickets furnished by the bank. When checks are deposited, the banks require them to be indorsed, whether drawn to the order of depositor or not.
- 3. Do not allow your bank book to run too long without balancing. Compare it with the account of the bank.
- 4. Write your signature with the usual freedom and never vary the style of it.
- 5. Draw as few checks as possible; when several bills are to be paid draw the money in one check.
 - 6. Always keep your check book under lock and key.
- 7. In filling up checks do not leave space in which the amount may be raised. Always fill the space with a dash. Use words instead of figures.
- 8. If one who holds a check, as payee or otherwise, transfers it to another, he has a right to insist that the check be presented that day, or at farthest, on the day following.
- 9. If you wish to draw money from the bank on your own check, write: "Pay to myself" instead of writing your name in the body of the check.
- 10. If you write a check to a person who will have to be identified at the bank in order to receive payment, have him indorse the check and then beneath his signature write "Signature O. K.," and sign your name. This will enable him to draw payment on the check without further identification.

DRAFTS

RULES FOR WRITING, ACCEPTING AND TRANSFERRING

What a Draft Is.—A draft is a written order by one person or firm upon another for the payment of a specified sum of money.

Names of Parties.—The one who writes the draft is called the drawer, the one on whom it is written is called the drawee, and the one to whom it is to be paid the payee.

When Payable.—Drafts may be made payable at sight, on demand, or at a certain time after date or after sight.

Negotiability.—Drafts are negotiable both before and after acceptance.

Drafts may be Drawn to One's own Order, and then indorsed in favor of the party to whom they are to be sent.

Acceptance.—By acceptance is meant the act by which a person, upon whom a draft is drawn, binds himself to pay it when due. This usually is done by writing the word "Accepted," together with the date, in red ink across the face of the draft and signing the acceptor's name below.

When Acceptance is refused, it is said to be dishonored, and the drawer and indorser are held liable for payment. The draft is then protested.

Protest.—A protest is a formal declaration made by a notary public, under his hand and seal, at the request of the holder, of non-acceptance or non-payment, and the parties liable are formally notified.

Drafts Drawn at Sight or on Demand are not presented for acceptance, but for payment only.

A Promise to Accept a Draft will be equivalent to an acceptance if it has given credit to the bill.

Any Material Alteration of a draft after it has been drawn or accepted makes it valueless.

Death of Drawee.—Should the person upon whom the draft is drawn die before it is accepted, it should be presented to his legal representatives.

Bank Drafts.—A draft made by one bank upon another is called a bank draft. This is the most common kind. (See page 159.)

In Buying a Draft at the Bank, it is always best to have it made payable to yourself, and then indorse it in favor of the person to whom you intend to transfer it. This gives you a good receipt for the money.

Drafts on Foreign Countries are called bills of exchange. (See BILLS OF EXCHANGE.)

FORMS OF DRAFTS

To One's Own Order

\$50.00

Lincoln, Ill., Feb. 2, 1904. Ten days after sight pay to my own order Fifty Dollars, and charge to J. H. JONES.

To William Hill.

Lincoln. Ill.

Sight Draft

Davenport, Iowa Aug. 3, 1904. \$100.00 At sight pay to the order of Henry Starr One Hundred Dollars, and charge to the account of FRANK LAWLER. To William Dix.

Chicago, Ill.

Time Draft

\$50.00 St. Joseph, Mich., Nov. 1, 1904. At ten days' sight pay to the order of Warren Hazelteen at St. Joseph National Bank Fifty Dollars.

Value received. To H. R. Moser,

CHAS. HUNTER.

Lansing, Mich.

Time Draft, Second Form

\$320.00 St. Paul, Minn., Oct. 1, 1904. Twenty days from date pay to J. R. Kotter, or order, Three Hundred and Twenty Dollars. Value received JAMES CLARK.

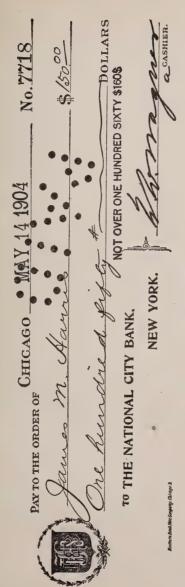
To Wm. K. Asire, St Paul, Minn.

BILLS OF EXCHANGE

How Drawn.—Bills of exchange, as drafts on foreign countries are usually called, are drawn in sets of three, each one referring to the other two. They are alike, except that they are numbered first, second, and third. If the first, which is usually kept by the purchaser to be presented by himself for payment at the foreign bank, is lost, then the second or third, being sent by mail, may be used. The payment of one cancels the other two. To distinguish them from other drafts they are sometimes called foreign bills of exchange, and the others are sometimes called inland bills of exchange.

The bank selling a Bill of Exchange, having money deposited in a foreign bank, orders the bill cashed there In this way travelers are saved the trouble and risk of carrying large amounts of money with them. Merchants engaged in foreign trade also find them very convenient, and make all their payments through Bills of Exchange.

FEDERAL TRUST & SAVINGS BANK



A Bank Draft

This is called a "New York draft." The cancellation mark shows it has been paid in New York and Drawn by a Chicago bank, in favor of James M. Harris, on a bank in New York. returned to the bank issuing it.

SET OF FOREIGN BILLS OF EXCHANGE

FORM 1

Chicago, Ill., Nov. 5, 1904. Exchange for £,100 Ninety days after sight of this our First of Exchange (second and third of the same date and tenor unbaid) pay to the order of Chas. Wilson One Hundred Pounds Sterling, value received, and charge the same to Henry Horman & Co. To the Commercial Bank of Glasgow, Glasgow, Scot. No. 642 FORM 2 Chicago, Ill., Nov. 5, 1904. F.xchange for f. 100. Ninety days after sight of this our Second of Exchange (first and third of the same tenor and date unpaid) pay to the order of Chas. Wilson One Hundred Pounds Sterling, value received, and charge the same to Henry Horman & Co. To the Commercial Bank of Glasgow,) No. 642 Glasgow, Scot. \ FORM 3 Chicago, Ill., Nov. 5, 1904. Exchange) for Ninety days after sight of this our Third f. 100. of Exchange (first and second of the same tenor and date unpaid) pay to the order of Chas, Wilson One Hundred Pounds Sterling, value received, and charge the same to Henry Horman & Co. To the Commercial Bank of Glasgow, 1 No. 642 Glasgow, Scot. S

LETTERS OF CREDIT

A Letter of Credit is a letter from a bank or mercantile house addressed to its agents or correspondents elsewhere, requesting them to pay or advance money to the bearer of the letter.

How Secured.—The person who obtains a letter of this kind usually is required to deposit an equivalent sum with the person or firm from whom he obtains it, in money, bonds, mortgages or stocks.

A Copy of the Letter is also sent by mail to the person addressed, in which the bearer is so described that he may be recognized.

If the Letter is not Accepted by the person to whom it is addressed the bearer should at once notify the author and give the reason why it has not been honored.

Party Held Responsible.—The party whose signature the letter bears is held responsible for the amount involved, if the person to whom it is addressed accepts it.

FORM OF LETTER OF CREDIT

350 Broadway, New York, Jan. 10, 1904.

MESSRS. HAVART, REED & Co.,

London, Eng.

DEAR SIRS: We take pleasure in introducing to you Mr. Chas. P. Hodder of this city, who visits England for the purpose of investing in property in the city or vicinity of London, and desires to open a credit with you of Fifteen Thousand Dollars. We hereby authorize you to honor his drafts to an amount not exceeding in the aggregate the above-named sum and charge the same to us.

The signature of Mr. Hodder accompanies this.

Yours very respectfully,
FOSTER, WALKER & Co.

Signature of Chas. P. Hodder.

Foster, Walker & Co.'s Letter Sent by Mail

350 Broadway, New York, Jan. 10, 1904.

MESSRS. HAVART, REED & Co.,

London, Eng.

GENTLEMEN: We have to-day granted a letter of credit on your house (as per enclosed duplicate) to Mr. Chas. P. Hodder for Fifteen Thousand

Mr. Hodder is forty-five years of age, five feet ten inches tall, has a light complexion, light brown hair, and blue eyes.

Respectfully yours,

FOSTER, WALKER & Co.

A GUARANTEE LETTER OF CREDIT

Jackson, Miss., March 9, 1904.

MR. WALTER COLEMAN,

Chicago, Ill.

Dear Sir: Mr. Ira F. Van Arsdale, the bearer of this letter, is an extensive dealer in boots and shoes in this city, and is now about visiting your city for the first time, with a view of purchasing goods. We have reason to know the condition of his financial ability and his promptness in meeting his liabilities. We therefore readily guarantee the payment of any indebtedness that he may contract with your house not exceeding Ten Thousand Dollars.

Very respectfully.

MEYER, SCHULTZ & Co., 175 Moline St.

The Letter Sent by Mail

175 Moline St., Jackson, Miss., March 9, 1904.

MR. WALTER COLEMAN,

Chicago, Ill.

DEAR SIR: We have to-day given a guarantee letter of credit upon you for Ten Thousand Dollars in merchandise. The bearer of our letter of credit is Mr. Ira F. Van Arsdale, an acquaintance of ours and a prominent merchant of this city.

Mr. Van Arsdale is thirty years old, six feet tall, has a dark complexion, with dark hair and eves.

We commend him to your kind consideration.

Respectfully,

MEYER, SCHULTZ & Co.



GEORGE WASHINGTON

Washington studied and mastered without help the intricate forms of business. He copied bills of exchange, notes, drafts, bills of sale, receipts, and all the varieties of business forms, with a precision and elegance that were remarkable.—IRVING.

INTEREST LAWS AND STATUTES OF LIMITATION Special laws in each state should be consulted.

Special laws in each state should be consulted.						
	Interes	st laws.	Statute of limitations.			
States	Legal	Rate al-	Judg-	27.	Open	Days
and	rate,	lowed by	ments.	Notes,	accounts.	of
Territories.	per cent.	contract,	years.	years.	years.	grace
41-1		per cent.				
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Arizona.	6	Any 10	5 10	4 5	3	3
Arkansas	6	Any	5	5 5	ئ 9	0
Colorado	8.	Any	20	6	6	3 0 0
Connecticut	6	¹ Any	7	106	6	ŏ
Delaware	6	6	20	6	3	3
District of Columbia	6	10	12	3	3	3 0
Florida	8 7 7	10	20	5	22	0
Georgia	7	8	7	6	4	3 0
Idaho	7	12	6	5	4	0
Illinois	5	7	20	10	5	0
Indiana		8	20	10	6	3
Iowa	6	8	20	10	5	3
Kansas Kentucky	6	6	$\frac{5}{15}$	$\frac{5}{15}$	5 3 5 3 6	0 3 3 0 3 0
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Minnesota	6	10	10	6	6 3	\$3 3 3 0 3 0 0 3 0 0 3 0 0
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New York	6	6	20	6	6	Ŏ
North Carolina	6	6	10	7	3 6	3
North Dakota	6	12	10	6	6	0
Ohio	6	.8	5	15	6	0
Oklahoma	7	12	1	5	3 6	3
Oregon	8 6 6	10	10	6 6	6	3
Rhode Island.	6	Any	20	6	6	0
South Carolina	7	Ally 8	$\frac{20}{20}$	6	6	3
South Dakota	7 7 6	12	10	6	6	3
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Texas	1 8	1Ŏ	10	4	2	3
Utah	8	Any	7	4	2	0
Vermont		6	8	- 6	6	0
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Washington	6 8 6	Any	6 10	6	3	0
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Wyoming	8	12	5	5	8	l ő
		1 14				

10ver 6 per cent cannot be collected by law. Three years for merchants. 3Not witnessed, six years. 4Not on notes or drafts on demand. ⁵Not courts of record, five years. ⁶When return not made on execution, ten years. Rate prevailing in another State permitted on evidence of indebtedness wholly secured by mortgage on property in the other State. 8In Massachusetts grace is allowed on sight drafts and bills of exchange

LEGAL HOLIDAYS

When falling on Sunday, the Monday following is observed. January 1. New Year's Day: In all the States (including the District of Columbia, Arizona, New Mexico, and Oklahoma), except Massachusetts, Mississippi, and New Hampshire.

January 8. Anniversary of the Battle of New Orleans: In Louisiana.

January 19. Lee's Birthday: In Florida, Georgia, North Carolina, South Carolina, Virginia, and Alabama.

February 12. Lincoln's Birthday: In Connecticut, Delaware, Illinois, Minnesota, New Jersey, New York, North Dakota, Pennsylvania, Washington and Wyoming.

February 22. Washington's Birthday: In all the States (including the District of Columbia, Arizona, and Oklahoma), except Mississippi, where it is observed by exercises in the public schools only.

March 2. Anniversary of Texan Independence: In Texas.

March 4, in the District of Columbia, when it falls on the day the President is inaugurated.

April 19. Patriots' Day: In Massachusetts.

April 21. Anniversary of the Battle of San Jacinto: In Texas. April 26. Confederate Memorial Day: In Alabama, Florida, Georgia, and Mississippi.

May 10. Confederate Memorial Day: In North Carolina and South Carolina.

May (Second Friday). Confederate Day: In Tennessee.

May 20. Anniversary of the Signing of the Mecklenburg Declaration of Independence: In North Carolina.

May 30. Decoration Day: In all the States and Territories (and District of Columbia), except Florida, Georgia, Idaho, Louisiana, Mississippi, North Carolina, South Carolina, Texas. In Virginia, known as "Confederate Memorial Day."

May (last Friday). Pioneer Day: In Montana, observed in public schools.

June (first Monday), even years, general State election in Oregon.
June 3. Jefferson Davis' Birthday: In Florida, Georgia, and Alabama. In Louisiana, known as "Confederate Decoration Day."

July 4. Independence Day: In all the States, District of Columbia, and Territories.

July 24. Pioneers' Day: In Utah.

August 16. Bennington Battle Day: In Vermont.

September (first Monday). Labor Day: In all the States and Territories (and District of Columbia), except Arizona, Mississippi, Nevada, and North Dakota. In Louisiana, observed in Orleans Parish.

September 9. Admission Day: In California. November 1. All Saints' Day: In Louisiana.

November — General Election Day: In Arizona, California, Colorado, Delaware, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Minnesota, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon (vote for Presidential elections only), Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, West Virginia, Washington, Wisconsin, and Wyoming, in the years when elections are held therein.

November — Thanksgiving Day (usually the fourth Thursday in November): Is observed in all the States, and in the District of Columbia, Arizona, New Mexico, and Oklahoma, though in some States it is not a statutory holiday.

December 25. Christmas Day: In all the States, and in the District of Columbia, Arizona, New Mexico, and Oklahoma.

Sundays and Fast Days are legal holidays in all the States which designate them as such.

Arbor Day is a legal holiday in Arizona, Maine, Minnesota, New Mexico, Wisconsin, and Wyoming, the day being set by the Governor; in Texas, February 22; Nebraska, April 22; Utah, April 15; Rhode Island, May 11; Montana, second Tuesday in May; Florida, first Friday in February; Georgia, first Friday in December; Colorado (school holiday only), third Friday in April; in Oklahoma, the Friday following the second Monday in March.

Good Friday is a legal holiday in Alabama, Delaware, Louisiana, Maryland, Pennsylvania, and Tennessee.

Mardi-Gras day (Shrove Tuesday or last day of Lent) is a legal holiday in Alabama and the parish of Orleans, Louisiana.

Every Saturday after 12 o'clock noon is a legal holiday in New York, New Jersey, Pennsylvania, Maryland, Tennessee, Virginia, the District of Columbia, and the city of New Orleans, and in Newcastle County, Del., except in St. George's Hundred; in Louisiana and Missouri in cities of 100,000 or more inhabitants; in Ohio in cities of 50,000 or more inhabitants; and June 1 to August 31 in Denver, Col.

There is no national holiday, not even the Fourth of July. Congress has at various times appointed special holidays. In the second session of the Fifty-third Congress it passed an act making Labor Day a public holiday in the District of Columbia, and it has recognized the existence of certain days as holidays for commercial purposes, but, with the exception named, there is no general statute on the subject. The proclamation of the President designating a day of Thanksgiving only makes it a legal holiday in the District of Columbia and the Territories, and in those States which provide by law for it.

SALES OF PERSONAL PROPERTY

What Constitutes a Sale.—A sale of goods is the transfer of ownership thereof for a consideration in money, paid or to be paid.

Earnest will always bind the bargain, but it must consist of the giving away of something valuable, and not a mere ceremony.

Delivery of the Goods.—On a contract of sale of goods the general rule is, that the delivery is to be at the place where the vendor has the article.

Delivery to an Agent, or carrier, if with the purchaser's consent, is sufficient.

Payment.—The law presumes that when a sale is made there is to be immediate payment unless otherwise agreed.

Credit may be expressly agreed upon, or may be implied from custom and usage.

How Goods are to be Shipped.—If the goods are to be sent to a distant point, they must be shipped by the route directed by the purchaser. If no direction is given, they are to be sent by the usual route. If so sent, the goods are the buyer's at the moment of shipment, and the seller is relieved of responsibility. But if the goods are to be delivered by the seller at a distant point, he is responsible that they reach there in good condition.

Goods Must Agree with Terms of Sale.—Unless the goods which are delivered agree with the terms of sale, the buyer need not accept them. Even after he has used a portion of them, if he finds that they are substantially different from what they were represented to be, he can return them or notify the seller that he will not accept them, and that he holds them at the

seller's risk, subject to his order at the point where the buyer received them.

Sale of Debts.—A claim upon a debtor may be sold just the same as other property, but notice of such a sale must be given to the debtor.

Defects.—Should there be any defects in the property or animals, which can be seen, that does not relieve the buyer from meeting his obligations, though he claims not to have seen the defects.

But if the defects cannot be seen and the seller recommends the property as good or sound, the buyer is relieved from filling his part of the contract.

Warranty.—If the seller of goods makes any assertion respecting the kind, quality, or condition of the article upon which he intends the purchaser should rely as a fact, and upon which he does rely, that is a warranty.

Where Goods are Sold by Sample there is an implied warranty that the goods correspond with the sample.

It is a general rule that the employer will be bound by the warranty of his clerk or shopman, if acting within the scope of his authority.

Warranty must be at the time of sale; if it be made after, it is void for want of consideration.

Stopping Goods on the Way to Purchaser.—The seller of goods, under certain conditions, has a right to stop goods that are in a carrier's hands and on the way to the buyer at some distant point. This is termed stoppage in transit.

Fraud on Part of the Buyer.—If the buyer has been guilty of such fraud as entitles the seller to rescind the sale; or if the buyer is actually insolvent; or if he has misrepresented his condition or made false pretenses in buying; or if he be so embarrassed that in reasonable probability he cannot pay for the goods, the seller has a right to stop them in transit.

If the goods were sent to pay a debt of the seller's they cannot be stopped.

When the Right of Stoppage Ceases.—The right to stop goods in transit ceases when the buyer receives the goods at their appointed destination; or when the buyer takes the goods while on their way to him; or when the buyer has transferred the goods by bill of lading to a third party, in good faith and for value; or when the goods have passed into possession of the buyer's agent; or when the goods have been sold by the buyer,

and the purchaser has taken possession of them; or when the seller has delivered the key of his warehouse to the buyer that he may get the goods; or when the buyer has agreed with the seller that the goods shall remain in the seller's warehouse, with or without storage; or when the buyer has handed the seller's order to the keeper of the goods for the delivery of the same.



BILLS OF SALE

A Bill of Sale is a written instrument by which one person, for a moneyed consideration, transfers the right and interest which he has in goods or chattels to another.

The Validity of the Sale does not depend on the actual possession of the goods, but, as a general rule, in order to establish ownership in law, the purchaser must take actual possession of the property purchased. In some States, however, if the sale was not made fraudulently, for the purpose of evading the payment of just debts, the bill of sale is prima facie evidence of the sale, and will hold good against the creditors of the seller.

In Cases of Dispute juries have the power to pass decision upon the fairness or unfairness of the sale, and if fraud can be shown by the evidence, the bill of sale will be ignored and the sale declared void.

Form of Bill of Sale

Know all Men by These Presents, That I, John R. Hartman, of Bedford, Indiana, in consideration of Seven Hundred and Seventy Dollars (\$770), the receipt of which is hereby acknowledged, do hereby grant, sell, transfer and deliver unto Charles Caxton the following property, to wit:

Five 1	Horses .	 	 @	\$100\$500
Two I	Buggies	 	 	90180
Two I	Harness	 	 	25 50
Two I	Plows	 	 	20 40

In witness whereof, I, the said John R. Hartman, have hereto set my hand this twenty-first day of May, 1904.

(Witness) ———

Bill of Sale-of a Horse, with Warranty

Know all Men by These Presents, That in consideration of One Hundred and Fifty Dollars, to me paid by Henry King, the receipt of which is hereby acknowledged, I, William Morris, by these presents do bargain, sell, and convey to the said Henry King, his heirs, executors, administrators, and assigns, one bay horse, of the male sex, bay color, fifteen hands high, with a white star in the forehead, known as Bay Boy, to have and to hold the same unto the said Henry King, his heirs, executors, administrators, and assigns forever.

And I, for myself, my heirs, executors, and administrators, will warrant and defend said horse unto him, the said Henry King, his heirs executors, administrators, and assigns, against the lawful claims and demands of all and every person or persons whatsoever.

Witness my hand this tenth day of May, 1904.

WILLIAM MORRIS.

JOHN R. HARTMAN.

Witnesses:

JAMES FUNSTON, RICHARD BOYCE.





TRANSPORTATION

Liability of Railroad and Express Companies

The Business of Transportation, especially of goods and merchandise, and the laws which regulate the same are of great importance, and should be thoroughly understood by every one.

Carriers.—Those who transport goods for others are called carriers, and since all the business is done under contract such contracts are very numerous.

Common Carriers.—A common carrier is one whose business is the carrying of goods or persons from place to place for a consideration, either by land or water.

The most common ones are the railroad, steamboat, steamship, and express companies, but truckmen, teamsters, expressmen, and others who offer their carrying services to the public generally are also common carriers.

Common Carriers of Goods

Two Elements are Necessary to constitute one a common carrier, (1) his following it as a business, and (2) his offering his services to the public generally. Those who work only for a particular person are not common but private carriers.

Obligation to Take.—A common carrier is obliged by law to take any goods that are offered to him for transportation to any point on his route, provided his usual compensation is offered him in advance.

In case the carrier's cars are full he may refuse to take more; he may also refuse to carry freight of a dangerous character, such as explosives.

Compensation.—Carriers may establish such rates or make such contracts as they choose. Large corporations usually have established schedules of rates. They can change these from time to time, but they must accept the goods of all persons at those rates. They cannot demand more from one person than from another, but must treat all alike.

Discrimination Unlawful.—The carrier must not make unjust discrimination as to prices of carriage. Before the passage of the Inter-State Commerce law, systematic discrimination in their charges was practiced by some of the railroad companies in the United States. Great corporations were given low rates for their vast shipments, while the small shipper was crushed by much higher charges for transportation. Unjust discriminations were also made between different towns and localities. The Inter-State Commerce law renders such discriminations unlawful.

Compensation.—Common carriers may demand their pay in advance, yet they often transport the goods and collect the freight from the person receiving the same.

In case the person to whom the goods are sent refuses to pay the charges the carrier must collect from the sender, for it was with him the contract was made and he alone can be sued. The other party made no contract with the carrier, hence cannot be sued. But if the sender is acting as the agent of the person to whom they are to be sent the company may sue the latter, for in that case the contract was made with him.

Diligence and Dispatch —A common carrier is bound to carry the goods with reasonable diligence and dispatch, and safely deliver them to the person to whom they are consigned, without any loss or injury, except such as may be occasioned by the act of God, the public enemy, or the fault or fraud of the owner.

When Liable beyond His Own Route.—If a carrier receives goods for transportation and agrees to deliver them beyond the terminus of his own route he renders himself responsible for the whole route. He may by special contract limit his liability to his own route, and absolve himself by safe delivery to the next connecting carrier.

Carrier's Lien.—Common carriers have another way to obtain their pay. Common carriers may keep the goods they have transported until their charges are paid.

Thus, there are three ways in which a carrier may enforce payment of his freight, viz.:

- 1. He may refuse to take the goods unless payment is made in advance.
 - 2. He may transport them and then keep them until paid
- 3. He may transport and deliver them and then sue the person with whom he made his contract.

Loss or Injury.—Common carriers are responsible for any loss or injury occurring to goods which they are transporting. Any damages that have occurred to the goods while in possession of the carrier must be made good. He has complete control over the goods as if they were his own, and if while in his possession they suffer injury it is his loss.

The carrier is not liable for the "act of God," such as cyclones, floods, lightning, a public enemy as in war, or (in shipping) for perils of the sea. But fire, unless caused by lightning, does not come under this head. Robbery or theft does not relieve them from liability.

Any damages that have occurred to the goods while in possession of the carrier must be made good if it occurred through the carelessness of any of the employees.

Perishable Goods.—Carriers are not responsible for loss to fruits that decay in their possession, or goods shipped in defective boxes or carelessly packed, such as glassware, crockery or other articles that are easily broken.

If a package is of great value, such as money, the common carrier must be informed of it.

Collecting Damages.—In case of damage to goods the railroad or express company should be duly notified and the amount of damages stated or sworn to before a proper officer and with sufficient evidence, if required.

A common carrier must pay the market value at the point of destination of all property lost or destroyed by his fault while in his care for transportation.

Receipt.—In shipping goods by freight or express a receipt or bill of lading should always be taken and carefully preserved.

Bills of Lading.—The bill of lading is the carrier's acknowledgment of the receipt of goods, and is evidence of contract between the parties, and is supposed to contain all the carrier's claim for non-liability. Three copies of the bill are made out; one is kept by the shipper, another by the party transporting the goods, and the third is sent to the person to whom the goods are consigned.

Bills of Lading are transferable and assignable, and the assignee may sue for the recovery of the goods.

Form of Bill of Lading.

	New York, December 10, 1904. well conditioned, by James C. Hanton
Marked as follows:	whereof Chas. Bollman
Sylvester Clyde,	is master, now lying in the port of
Rio Janeiro.	New Yorkand bound for
	the port of Rio Janeiro

In witness whereof I have affirmed to three bills of lading, all, of this tenor and date; one of which being accomplished the others to stand void.

Henry R. Sandford.

(In the above form, Hanton is the shipper or consignor, Clyde the consignee, and Sandford the carrier. It might be signed by the master (Bollman) instead of by Sandford.)

Common Carriers of Persons

A common carrier of persons is one who holds himself out to carry for hire from place to place all such persons as choose to employ him. Railroads, steamboats, street car, omnibus and stage line companies are the most common.

His Duty.—He must carry all persons who may present themselves for carriage, provided they are in a proper condition and offer their fare. He is bound to provide suitable and proper means of conveying, with suitable attention.

His Liability.—He is bound to use the highest degree of care and diligence in the conduct of his business and is responsible for negligence of any kind. He is bound to protect the passengers against insult or injury from his servants or employees. He must give passengers reasonable time to get off and on the carriage and suitable means of doing so.

Baggage.—Passenger carriers are responsible for the baggage of their patrons. If the servants of the carrier are allowed to carry parcels, the carrier will be responsible for their safe delivery, although the carrier derives no benefit therefrom.

A Baggage Check is evidence of the liability of the company issuing it.

Baggage does not include merchandise, or money, except an amount reasonable for expenses.

If a carrier sells a person a ticket to a point beyond the terminus of his own route, and especially if he also checks the baggage to such a point, he is responsible for the safety of the baggage to that point.

ACKNOWLEDGMENTS

An Acknowledgment is a declaration, before an authorized officer, of a party who has executed a deed or other document, that it is his free and voluntary act.

What Instruments Must be Acknowledged.—All deeds and conveyances of land, to be effectual as to third parties, must be recorded upon previous proof or acknowledgment of their execution. In some of the States, chattel mortgages must be acknowledged and recorded the same as deeds.

Before Whom Taken.—Within the several States acknowledgments may be taken in general before the following officers: Notaries Public and Justices of the Peace generally within their territorial jurisdiction, and in any place of the State usually before Judges and Clerks of the Supreme, Circuit, Probate, and County Courts, Judges of the United States Courts, Chancellors. Registers, Masters in Chancery, and Court Commissioners. County Recorders, Town Clerks and their assistants, United States Commissioners, County Surveyors, County Auditors, Registers of Deeds, Mayors, and Clerks of incorporated cities may take acknowledgments within their jurisdiction; besides the foregoing, in several States also the deputies of the enumerated officers, and in Connecticut, Commissioners of the School Fund: in Louisiana, Parish Recorders and their deputies: in Maine, women appointed by the Governor for that purpose; in Michigan, members of the Legislature; in Mississippi, members of County Board of Supervisors; in Nebraska, the Secretary of State: in New York, Recorders of cities and Commissioners of Deeds; in Pennsylvania, Mayors, Recorders, and Aldermen of Philadelphia, Pittsburg, Allegheny, and Carbondale; in Rhode Island, State Senators; in Vermont, Registers of Probate; in West Virginia, Prothonotaries, in Wisconsin, Police Justices.

Without the State and within the United States, the following officers are authorized to take acknowledgment: Judges and Clerks of Courts of Record, Notaries Public, Commissioners appointed for that purpose by the Governors, and officers authorized to take acknowledgments within their respective States.

Besides the foregoing, also, in Colorado, Secretaries of State; in Delaware, Mayors of cities; in Illinois, Justices of the Peace, Commissioners of Deeds, and Mayors of cities; in Kentucky, Secretaries of State; in Michigan and Wisconsin, Master in Chancery; in New Jersey, New York, North Carolina, Pennsylvania, and Rhode Island, Mayors and Chief Magistrates of cities.

Without the United States.—Judges of Courts of Record, Mayors or Chief Magistrates of cities, towns, boroughs, counties, Notaries Public, Diplomatic, Consular, or Commercial Agents of the United States resident and accredited in the country where the acknowledgment is taken. (See *Deeds*.)

Form of Single Grantor's Acknowledgment

STATE OF ILLINOIS, SS. County of Cook,

I, William Mann, a notary public for and within said county, in the State aforesaid, do hereby certify that Andrew Field, personally known to me as the real person whose name is subscribed to the foregoing deed as having executed the same, appeared before me in person and acknowledged that he signed, sealed, and delivered the said instrument of writing as his free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and seal of office, this second day of September, A. D. 1904. WILLIAM MANN,

[NOTARIAL SEAL.]

Notary Public.

Acknowledgment by Husband and Wife

STATE OF OHIO, County of Franklin,

Before me, Everett Howe, a notary public for and within said county, in the State aforesaid, appeared the above named Charles Kendall, and Susan Kendall, his wife, both personally known to me as the real persons whose names are subscribed to the within conveyance, as having executed the same, and acknowledged that they signed, sealed, and delivered the same for purposes therein mentioned.

And the said Susan Kendall, having been by me examined, separate and apart, and out of hearing of her husband, acknowledged that she executed the same freely, and without any fear or compulsion of her said husband.

Given under my hand and seal of office, this fifteenth day of January, A. D. 1904. EVERETT HOWE,

[NOTARIAL SEAL.]

Notary Public.

AFFIDAVITS

An Affidavit is a statement made under oath (or affirmation) before an authorized official, and signed by the person making it.

For What Used.—In judicial proceedings, except for trial of causes, affidavits are the usual means of presenting evidence to the court, and are most frequently used to support or oppose the numerous applications for orders, known as motions.

No Particular Form is prescribed by law, but the affidavit must specify the State and county in which it is made, so as to show that the officer who administered the oath had authority to do so.

The Statement should be confined to facts within the actual knowledge of the person making the affidavit, or when made on information and belief, that fact should be stated.

Jurat.—The officer taking the affidavit affixes a clause called the jurat, certifying the time and fact of the oath.

Who may Take.—Judges, Justices of the Peace, Commissioners of Deeds, Notaries Public, and other and similar officers have authority to take affidavits.

General form of Affidavit

STATE OF PENNSYLVANIA,
Allegheny County, City of Pittsburg,

Bernard Beckman, being duly sworn, deposes and says (or alleges and says): That (Here set out in full and accurate language the matters to be alleged.)

[SEAL] BERNARD BECKMAN.

Sworn (or affirmed) before me, this fifteenth day of January, A. D. 1904.

JOHN WELLINER,

Justice of the Peace.

(If the affiant is unable to read, the subscription should be as follows:) Subscribed and sworn to before me, this —— day of ———, A. D. 19—, the same having been by me (or in my presence) read to this affiant, he being illiterate (or blind), and understanding the same.

(Officer's signature and title.)

Affidavit to Accounts

STATE OF ILLINOIS, SS. County of Cook.

Franklin Gage, of Chicago, in said County and State, being duly sworn, deposes and says: That the above account, as stated, is just and true.

That the above sum of Fifty Dollars is now justly due and owing to this deponent by the above named James Higgins.

That he, the said Francis Gage, has never received the same or any part thereof, either directly or indirectly, nor any person for him, by his direction or order, knowledge or consent.

Franklin Gage.

Sworn and subscribed before me, this ninth day of June A. D. 1904.

MICHAEL SWANN,

Justice of the Peace.

Affidavit to Declaration or Petition

STATE OF ILLINOIS, County of Sangamon,

Abel Jones, being duly sworn, says: That the facts set forth in the foregoing declaration (or petition) are true.

ABEL JONES.

Subscribed and sworn to before me this tenth day of June, A. D. 1904.

ISAAC MYERS,

Justice of the Peace.

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THEODORE ROOSEVELT

AGENCY

An Agent, in law, is a person authorized to act for another, called the principal, the relation between them being known as agency.

Agency is one of the most common and necessary relations of life. Nearly every one acts every day as the agent of some one else. Thus every clerk in a store is the agent of the proprietor. Almost all the business of brokers, commission merchants, law-

yers, auctioneers, etc., is some sort of an agency. Corporations act wholly by means of agents, viz.: their officers, clerks, etc.

Who May Act as Principal or Agent.—Any one who is competent to do business for himself may act as principal, and appoint an agent to transact it for him. Persons who cannot do business for themselves may, however, be appointed to act as agents. Therefore minors and married women may act as agents.

A General Agent is one authorized to represent his principal in all his business of one particular branch.

A Special Agent is one appointed to a particular thing only, or a few particular things.

How Appointed.—An agent's authority may be given orally or by writing; no particular form of words is necessary. In important matters, the agent is often appointed by a written instrument which is called a power of attorney. When thus authorized under seal, an agent can sign deeds, or other conveyances of real estate or sealed instruments.

Extent of Authority.—The employing of an agent is the act which gives him his authority. An agent has authority to do whatever is necessary or generally done in connection with the purposes for which he is employed. Some employments give very wide latitude of power, and leave very much to the discretion of the agent; others give a very limited authority. Thus any act of the president or cashier of a bank in connection with its banking business binds the bank, while a messenger would have authority only to carry a message.

Liability of Principal.—The principal is responsible for the acts of his agent committed in the execution of the agency and which are within the real or apparent scope of the principal's business. A distinction is here made between a special and a general agent. If a special agent exceeds or disobeys his instructions the principal is not liable; but if a general agent exceeds his authority the principal will be bound, if the act is within the apparent scope of an agent's authority, when it is such an act as is natural and usual in transacting business of that kind. By appointing him to do that business, the principal is considered as saying to the world that his agent has all the authority necessary to transact it in the usual way. For any criminal act, however, of the agent, the principal is not responsible unless he directly commands him to commit it.

Wrongful Acts of Agents.—As to wrongs and injuries, or torts, as they are called in law, the general rule is that the principal is

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liable to third persons for the wrongful acts of the agent when acting within the scope of his agency. But this does not relieve the agent of personal liability himself.

The Agent's Liability.—1. To his Principal. An agent is bound in transacting the affairs of his principal to exercise all the care which a reasonable man would exercise in his own, and to the utmost good faith. For any loss to the principal through neglect or unfaithfulness, the agent is liable to him. 2. To the Third Party. If an agent conceals his character as an agent, or transcends his authority, or otherwise so conducts himself as to make his principal responsible, or if he expressly binds himself in any way, he is himself liable to the third party.

Accounting.—The principal may call his agent to an account at any time, and may recover full indemnity for all injuries sustained by reason of the positive misconduct or negligence of the agent, or by his transcending his authority. An agent is not liable to his principal for not accounting until demand, which demand should be made at his residence, and sufficient opportunity given him for payment.

Compensation.—As against the principal, an agent is entitled to compensation for his services, and reimbursement for the expenses of his agency, and for personal loss or damage in properly transacting the business thereof.

Sub-Agents.—An agent may himself appoint another agent and act through him. Such a person is called a sub-agent, and is responsible to him who has appointed him, as his principal. In most commercial transactions sub-agents may be employed.

In Whose Name the Business is Done.—All business should be transacted and money deposited in the name of the principal. If an agent deposits money in his own name and the bank fails he is responsible for the loss.

Mixing Property.—If an agent mixes his own property with that of his principal, so that it cannot be identified, it will all belong to the principal.

Responsibility to Third Party.—Ordinarily a person can only be responsible for his own acts, but an agent's act is really considered as that of his principal. Therefore the rule is that the principal is responsible for the acts of his agent. The principal is bound even though he was unknown at the time the act was done, because he is supposed to derive the benefit of the same.

Ratification.—If a principal ratifies an act done, he is bound by it, whether he had given the agent authority or not. Subsequent ratification is equivalent to prior authority. But if such ratification is made under a mistake of circumstances it is not binding.

Responsibility of Third Party.—A person doing business with an agent is just as responsible to his principal as though he had transacted the business with the latter in person.

Revocation.—It is always in the power of the principal to revoke an agency; but if the power conferred is coupled with an interest, as where an agent has power to sell goods and apply the proceeds to his own use; or if it is given for valuable consideration, and a continuance of the agency is necessary to meet the responsibilities he has assumed in advance, to carry it on, then such agency cannot be revoked at the pleasure of the principal.

How to Revoke an Agency.—It must be done by an express act of the principal or by the act of law. The first implies a written form revoking the power of attorney that has been conferred, or any express declaration to revoke. The second occasion may be the death of the principal or agent.

Notice to be Given.—Due notice should be given by the principal of such revocation to those who knew of the authority given to such agent, because a general authority may continue to bind the principal after it has been actually recalled, if the agency were well known and the recalling of it wholly unknown to the party dealing with the agent without that party's fault.

Power of Attorney.—The authority by which one person is empowered to act in the place or as the attorney of another is called a *power of attorney*. The power of attorney is usually in writing and under seal, though for many purposes it may be created by parol. Strict rules of construction are applicable to these instruments, and courts incline to construe even general powers narrowly rather than broadly. If the power of attorney is to be recorded it should be properly acknowledged before an officer the same as a deed.

General Form of Power of Attorney

Know all Men by These Presents, That I, William Brown, of Chicago, County of Cook, and State of Illinois, have made, constituted, and appointed and by these presents do make, constitute, and appoint, George B. Stadden true and lawful attorney for me and in my name, place, and stead, [here state the purpose for which the power is given], giving and granting unto my said attorney full power and authority to do and perform all and every act and

thing whatsoever, requisite and necessary to be done in and about the premises, as fully, to all intents and purposes, as I might or could do if personally present, with all power of substitution and revocation, hereby ratifying and confirming all that my said attorney or his substitute shall lawfully do or cause to be done by virtue thereof.

In witness whereof, I have hereunto set my hand and seal the second day of January, one thousand nine hundred and four.

WILLIAM BROWN. [SEAL]

Signed, Sealed, and Delivered in Presence of

Power to take Charge of and Carry on Business

Know all Men by These Presents, That I, Henry Saylor, of Aurora, Illinois, do by these presents appoint, constitute, and make R. L. Winters my true and lawful attorney, for me and in my place and stead to take charge of my business of general merchandising at Aurora, Illinois; to purchase and sell for cash or on credit all such articles, goods, merchandise, and wares, as he shall deem proper, necessary, and useful in said business; to sign, accept, and indorse all notes, drafts, and bills; to state accounts; to sue and prosecute, compromise, collect, and settle all claims or demands due or to become due, now existing or hereafter to exist in my favor; to adjust and pay all claims or demands which now exist or may hereafter arise against me, either connected with said business or otherwise.

In witness whereof, I have hereunto set my hand and seal, this — day of ——, 19—

HENRY SAYLOR. [SEAL]

Power to Vote as Proxy at an Election

Know all Men by These Presents, That I, Homer Clark, of Peoria, Illinois, do hereby appoint J. R. Wagner to vote as my proxy at any election of directors or other officers of the [name the company or corporation] according to the number of votes I should be entitled to if I were then personally present.

GEORGE PAXTON. [SEAL]

Letter of Revocation

Know all Men by These Presents, That I, Fred B. Jennings, of Reading, Pennsylvania, in and by my letter of attorney, bearing date the —— day of ——, did make, constitute, and appoint R. L. Hartmann my attorney, as by said letter more fully appears.

That I, the said Fred. B. Jennings, do by these presents annul, countermand, revoke, and make void said letter of attorney and all authority and power thereby given said attorney, R. L. Hartmann.

In witness, etc.

FRED. B. JENNINGS.



BENJAMIN FRANKLIN

Seest thou a man diligent in his business. He shall stand before kings.—Prov. xxii; 29.

APPRENTICESHIP

An Apprentice is a person bound to service for a number of years, and receiving in return instruction in his master's business. Although in most of the States the contract is provided for by statute, apprenticeship, as a necessary means of access to a trade, has been almost universally abolished.

Form of Contract of Apprenticeship

This indenture of apprenticeship, between John Wilson, father of Harry Wilson, on the one part, and Chas. Hastings, of the other part, witnesseth. That the said Harry Wilson, aged 15 years on the 20th day of January, A. D. 1904, is hereby bound as an apprentice under the said Chas. Hastings, from the date hereof until the 20th day of January, 1907, to learn the trade and art of a printer, and is faithfully to serve the said Chas. Hastings and correctly conduct himself during the term of his apprenticeship.

And the said Chas. Hastings hereby covenants that he will teach the said Harry Wilson the said trade and art, and will furnish him, during said apprenticeship, with board, lodging, washing, clothing, medicine and other necessaries suitable for an apprentice in sickness and health; and will send him to a suitable public school at least three months during each of the first two years of said term; and at the expiration of the said apprenticeship will furnish him with two new suits of common wearing apparel and one hundred dollars in money.

In testimony whereof, the parties hereto have set their hands and seals this twentieth day of January, A. D. 1904.

Witnesses Henry Meyers.

(Apprentice) Harry Wilson.

(Master) Chas. Hastings.
(Parent) John Wilson.

Release of an Apprentice

Know all Men by These Presents, That —, son of —, did, by his indenture, bearing date the — day of —, A. D. 19—, bind himself as an apprentice unto — of —, for a term of — years (or until he should be of legal age) from the date thereof, as by said indenture more fully appears.

That [here state fully the reasons for the release] by reason whereof, the said — doth hereby release and forever discharge said — and his father, —, of and from said indenture and all service and all other agreements, covenants, and things contained therein, on their or either of their parts, to be observed and performed whatsoever, unto the day of this release.

In witness whereof, I have hereto set my seal this — day of —, A. D. 19—. (Signature.)





"Think twice before you sue your neighbor."

ARBITRATION

The Law Favors the peaceful settlement of controversies, and in many of the States there are statutes providing for the submission of disputed matters to the decision of one or more persons, called *arbitrators*. Their decisions are called *awards*.

The Statutes Generally Provide that if the parties to any suit in a court of record desire to submit the matter involved to arbitrators, an order may be entered directing such submission to three impartial and competent persons, to be named in such order—such arbitrators to be agreed upon and named by the parties, and if they fail to agree, each shall name one, and the court the third.

How Arbitration is Conducted.—The arbitrators so appointed are sworn, and proceed to hear and determine the matter, and draw up an award. The proceedings are much like proceedings in court or before a master in chancery. A copy of the award is delivered to each party, and if either party fails to comply therewith, the other within a year may file said award in court, and obtain a judgment.

Matters Not in Suit.—All persons having a requisite legal

capacity may, by an instrument in writing, signed and sealed by them, submit to one or more arbitrators any controversy existing between them, and may, in such submission, agree that a judgment of any court of record, competent to have jurisdiction of the subject-matter named in such instrument, shall be rendered upon the award made pursuant to said submission.

The Agreement to Submit should state explicitly what powers are intended to be conferred on the arbitrators, either by referring all controversies, or by distinctly limiting the particular controversies intended.

Reasonable Notice.—All arbitrators and all parties should have reasonable notice of the time and place of the hearing.

The Proceedings at the hearing, and the award itself should perfectly agree with the terms of the agreement to submit.

The Award should be a clear, distinct and final determination of each and all the matters of controversy contained in the agreement, and should embrace nothing more. If it be a rule of court it should be sealed up, otherwise a copy should be given to each party. The award must be signed by the arbitrators.

Submission May Be Recalled.—Before the award of the arbitrator or arbitrators is made, either of the parties to the controversy may withdraw his offer to accept the decision of the arbitrators. He must, however, give formal notice to each and all of the other parties of his intention, or his withdrawal is of no effect. The party who thus recalls the arbitration is responsible for all the costs and damages that have occurred in consequence of his previous consent to submit to arbitration.

Form of Agreement to Refer to Arbitrators

Know all Men by These Presents, That we, the undersigned, hereby mutually agree to submit all the matters in difference between us, of every kind, name, and nature, to the determination and award of Chas. Barker, Wm. Becker, and Robert Rehling, of Logansport, Cass County, Indiana, as arbitrators.

That said arbitrators, or any two of them, shall hear and determine the matters in dispute between us, and award the payment of all the costs and expenses incurred in such arbitration. That the said arbitrators shall make their award in writing on or before the fifteenth day of April, A. D. 1904. Done at Logansport, Indiana, March 15, A. D. 1904.

R. L. RAY, J. L. HOLMES, Witnesses HENRY GASSER, ROLAND R. CODY.

Form of Notice to Arbitrators

GENTLEMEN: You have been chosen arbitrators on behalf of the undersigned, to arbitrate and award between them, in divers matters and things

set forth in their submission, which will be produced for your inspection when you meet at —, in —, on the — day of —, at — o'clock — m., to hear the allegations and proofs.

Dated, etc.

HENRY GASSER, ROLAND R. CODY.

Form of Arbitration Bond

Know a.l Men by These Presents, That Henry Gasser and Roland R. Cody have this — day of —, A. D. 19—, submitted their matters in controversy concerning the boundary and division lines of a certain tract of land [describe it] to Chas. Barker, Wm. Becker, and Robert Rehling, to arbitrate, award, order, judge, and determine of and concerning the same.

That we, the undersigned, bind ourselves in the sum of — dollars that said Henry Gasser and Roland R. Cody shall submit to the decision and award of said arbitrators, provided said award be made in writing on or before the — day of —, A. D. 19—.

(Signed)

FRED HODGETTS, CHAS. R. WILLIAMS.

Form of Award

Know all Men by These Presents, That we, the undersigned, arbitrators of all the matters of difference, of every name, kind, and nature. between Henry Gasser and Roland R. Cody, by virtue of their agreement of submission of March 15, 1904, do award, order, judge and determine of and concerning the same as follows: That [then state the award in full.]

In witness whereof, we have, in each other's presence, hereunto set our hands this tenth day of April, 1904.

CHAS. BARKER, WM. BECKER, ROBERT REHLING.

ASSIGNMENTS

An Assignment is the transfer of a debt, obligation, bond, wages, or any kind of property, personal or real, or any actual interest therein. It also signifies the written instrument by which the transfer is effected.

How Made.—An assignment may be written on the back of the instrument it is intended to convey, or on a separate paper.

No Formality is Required by law in an assignment. Any instrument between the contracting parties that goes to show their intention to pass the property from one to the other will be sufficient. Proof will be called for only when it appears that it was merely a sham or fraudulent transaction.

Lands and Tenements.—Assignments relating to lands and tenements must be duly signed, sealed, acknowledged and recorded, like a deed.

For Benefit of Creditors.—Where property is assigned for the benefit of creditors, its actual transfer to the assignee must be made immediately. Such an assignment covers all of the assignor's property, whatever and wherever it may be, which is not exempt from execution.

Preferring Creditors.—At common law the assignor might give preference to certain of his creditors, but this is now generally prohibited by statute.

Correct Schedules of the property assigned should accompany the assignment in all cases.

An Assignment of a Mortgage carries with it, at the same time, without a transfer, the debt note or bond.

Some Things are not Assignable, as an officer's pay or commission, a judge's salary, government bounties, personal trusts, as a guardianship, or the rights of a master in his apprentice.

Form of Simple Assignment

For value received, I hereby assign all my right, title, and interest in the within contract to Chas. Hillman.

Dated Cleveland, Ohio, November 10, A. D. 1904.

MAURICE SANDFORD.

Assignment of Account

In consideration of One Dollar, value received, I hereby sell and assign to W. C. Cole the within account, which is justly due from the within George Sanders, and I hereby authorize the said W. C. Cole to collect the same. Chicago, March 10, 1904.

James Haster.

Assignment of Mortgage

Know all Men by These Presents, That I, William Bower, the within named mortgagee, for a consideration of Six Hundred Dollars hereby assign, transfer, and set over to Henry Klingman, his heirs and assigns, the within named instrument of mortgage, and all the real estate, with appurtenances therein mentioned and described, to have and to hold the same forever, subject, nevertheless, to the equity and right of redemption of the within named James Yundt, his heirs and assigns therein.

In witness whereof, the party of the first part has hereunto set his hand and seal this fifth day of April, A. D. 1904.

WILLIAM BOWER. [SEAL]

Sealed and delivered in presence of EDWARD MILLER.

Assignment with Power of Attorney

In consideration of the sum of One Thousand Dollars (the receipt of which is hereby acknowledged), I do hereby assign, transfer, and set over to Martin Scott (of Chicago, Ill.) all my right, title, and interest in and to

[here describe what]. And I hereby constitute said Martin Scott my attorney, in my name or otherwise, but at his own costs and charges, to take all legal measures which may be proper or necessary for the complete recovery and enjoyment of the premises.

Witness my hand and seal this twentieth day of January, A. D. 1904. (Witnesses)

Assignment for the Benefit of Creditors

Know all Men by These Presents, That whereas I William Colerage, merchant of the city of Minneapolis, and State of Minnesota, am indebted to various persons in considerable sums of money, which I am at present unable to pay in full. and being desirous to convey all my property for the benefit of my creditors, without preference or priority other than that provided by law:

Now, therefore, I, in consideration of the premises, and of the sum of One Dollar paid to me by Chas. Watson, of the same city and State, do hereby grant, bargain, sell, assign, and convey unto the said Chas. Watson all my lands, tenements, goods, and chattels of every name, nature, and description, wheresoever the same may be, excepting and reserving only such property as is exempted by law from attachment.

To have and to hold the same unto the said Chas. Watson, in trust and confidence, to sell and dispose of the said real and personal estate for cash upon such terms and conditions as in his judgment may appear best, and apply the proceeds in the following manner, to wit:

First. To pay all such debts as by the laws of the United States are entitled to preference in such cases.

Second. To pay and discharge all the just and reasonable expenses, cost, and charges of executing this assignment.

Third. To distribute and pay the remainder of said proceeds to the creditors of the party of the first part for all debts and liabilities which he may owe, rateably, in proportion to their respective claims.

Fourth. The residue and remainder of the proceeds of said sales, if any there be, shall be paid over to me, my executors, administrators, or assigns. In witness whereof, I have hereunto set my hand and seal this fifteenth

day of February, A. D. 1904.

WILLIAM COLERAGE. [SEAL]

Executed and delivered in presence of JOHN MYERS, HENRY BEST.

BAIL

Definition.—Bail is surety given for another's appearance in court. It is required in criminal cases generally and in civil cases involving tort or fraud. The term bail is applied also to the sureties themselves, and to the amount in which they bind themselves for the appearance of their principal.

Excessive Bail.—The constitution of the United States and the several States provide that excessive bail shall not be required.

Bail Bond.—The bond given by the sureties is termed a *recognizance*, and in case the prisoner does not appear for trial, or forfeits his bail, as it is termed, the sureties have to pay whatever sum is pledged in the bail bond or recognizance.

Form of Bail Bond or Recognizance

STATE OF ILLINOIS, SS. County of Kane.

This day personally appeared before the undersigned, a justice of the peace in and for said county, Charles Seibert and Frank Stanton, all of Aurora, in said County and State, and jointly and severally acknowledged themselves to be indebted unto the people of the State of Illinois, in the sum of Five Hundred Dollars, to be levied of their goods and chattels, lands and tenements.

Whereas, the above bounden Charles Seibert, on the tenth day of November, A. D. 1904, was brought and examined by and before John Brown, a justice of the peace in and for the county aforesaid, on a charge preferred against the said Charles Seibert, for [here state the offense charged] in said county, and the further examination of said Charles Seibert having been continued to the ninth day of December, A. D. 1904, at 10 o'clock A. M., and the said Charles Seibert having been adjudged and required by the said justice to give bonds, as required by the statute in such case made and provided, for his appearance to answer to said charge. Now the condition of this recognizance is such that if the above bounden Charles Seibert shall be and appear before the undersigned, at his office, in the city of Aurora, in said county, on the ninth day of December, A. D. 1904, at ten o'clock, A. M., then and there to answer to the said people of the State of Illinois, on said charge, and abide the order and judgment of said court, and not depart the same without leave, then and in that case this recognizance to become void, otherwise to be and remain in full force and virtue.

As witness our hands and seals this tenth day of November, A. D. 1904.

CHARLES SEIBERT. [SEAL]

FRANK STANTON. [SEAL]

Taken, entered into, and acknowledged before me this tenth day of November, A. D. 1904.

John Brown, Justice of the Peace.

BAILMENTS

Definition.—Bailment is a delivery of goods or money by one person to another in trust, for some special purpose, upon a contract, expressed or implied, that the trust shall be faithfully executed.

Names of Parties.—The owner of the goods bailed is termed the bailor, and the person to whom they are delivered or bailed, the bailee. The Responsibility of Bailees is governed by the consideration whether, in the case of the thing bailed, they have been guilty of ordinary neglect, gross neglect, or slight neglect. Ordinary neglect is the omission of that care which every man of common prudence takes of his own concerns. Gross neglect is want of that care which every man of common sense, how inattentive soever, takes of his own property. Slight neglect is the omission of that diligence which every circumspect and thoughtful person uses in securing his own goods and chattels.

The Rules Governing the law of bailments are: 1. A bailee who derives no benefit from his undertaking is responsible only for gross neglect, or, in other words, for a violation of good faith. 2. A bailee who alone receives benefit from the bailment, is responsible for slight neglect. 3. When the bailment is beneficial to both parties the bailee must answer for ordinary neglect. 4. A special agreement of any bailee to answer for more or less, is in general valid. 5. All bailees are answerable for actual fraud, even though the contrary be stipulated. 6. No bailee is chargeable for a loss by inevitable accident, except by special agreement.

A Borrower for Use is responsible for slight negligence.

A Pawnee is answerable for ordinary neglect.

A Depositary, one who receives goods or money to be kept for the bailee without a recompense, is responsible only for gross neglect.

A Carrier of goods or money without reward is responsible only for gross neglect, or breach of good faith.

A Private Carrier for hire, by land or water, is answerable for ordinary neglect.

The Hirer of a Thing is answerable for ordinary neglect.

A Workman for Hire must answer for ordinary neglect of the goods intrusted to him, and apply a degree of skill equal to his undertaking.

All Bailees Become Responsible for losses by casualty or violence, after their refusal to return the things bailed, on a lawful demand.

Borrowers and Hirers are answerable in all events, if they keep the things borrowed or hired after the stipulated time, or use them differently from their agreement:

Depositaries and Pawnees are answerable, in all events, if they use the things deposited or pawned.

Innkeepers.—An innkeeper is responsible for the acts of his

domestics, and for thefts, and is bound to take all possible care of the goods of his guests. He is regarded as an insurer, responsible for any injury or loss, not caused by the act of God, the common enemy, or the neglect or fault of the owner. When, however, a guest has the exclusive keeping and occupancy of a room, the innkeeper is not liable, nor where the guest takes upon himself the care of the goods, or neglects to use ordinary caution.

Warehousemen are bound only to take reasonable and ordinary care of the goods deposited with them. Thus, they would not be liable for thefts, or for loss or injuries caused by rats, unless occasioned by their want of proper care, etc. Their liability commences as soon as the goods arrive and the crane of the warehouse is used to hoist them in, and it terminates the moment they leave his premises. The warehouseman's liability is usually fixed or limited by receipts which they give for the goods deposited, and which pass from hand to hand by assignment. See Warehousing.

Wharfingers.—A wharfinger is one who keeps a wharf for the purpose of receiving goods on hire. His responsibility is similar to that of a warehouseman.

BANKRUPTCY

Bankruptcy is a system of procedure for the administration of the affairs of insolvent debtors, or bankrupts, the distribution of their property among their creditors, and the discharge of the debtors from further accountability for their debts.

The National Bankruptcy Law, approved July 1, 1898, provides for a complete system of bankruptcy, to be uniform throughout the United States and administered by the United States courts.

Voluntary Bankrupts.—Any person who owes debts, except a corporation, shall be entitled to the benefit of this act as a voluntary bankrupt.

Involuntary Bankrupts.—Any natural person (except a wage-earner or a person engaged chiefly in farming or the tillage of the soil), any unincorporated company, and any corporation engaged principally in manufacturing, trading, printing, publishing, or mercantile pursuits, owing debts to the amount of one thousand dollars or over, may be adjudged an involuntary

bankrupt upon default or an impartial trial, and shall be subject to the provisions and entitled to the benefits of this act. Private bankers, but not national banks or banks incorporated under State or Territorial laws, may be adjudged involuntary bankrupts.

Acts of Bankruptcy.—The National Bankrupt Law defines an act of bankruptcy by a person to consist of his having conveyed, transferred, concealed, or removed, any part of his property, with intent to hinder, delay, or defraud his creditors, or any of them; or transferred, while insolvent, any portion of his property to one or more of his creditors, with intent to prefer such creditors over his other creditors; or suffered or permitted, while insolvent, any creditor to obtain a preference through legal proceedings and not having at least five days before a sale or final disposition of any property affected by such preference vacated or discharged such preference; or made a general assignment for the benefit of his creditors; or admitted in writing his inability to pay his debts and his willingness to be adjudged a bankrupt on that ground.

Proceedings.—A bankrupt may of his own motion offer to surrender his property to the administration of the United States court and ask for his discharge in voluntary bankruptcy, or creditors may apply to the court to compel a bankrupt to turn over his property to be administered under the act for the benefit of the creditors. A petition may be filed against a person who is insolvent and who has committed an act of bankruptcy. within four months after the commission of such act. time shall not expire until four months after the date of the recording or registering of the transfer or assignment, when the act consists in having made a transfer of any of his property with intent to hinder, delay or defraud his creditors or for the purpose of giving a preference or a general assignment for the benefit of creditors, if by law such recording or registering is required or permitted; or if it is not, from the date when the beneficiary takes notorious, exclusive or continuous possession of the property, unless the petition creditors have received actual notice of such transfer or assignment.

The Proceedings Once Inaugurated and the adjudication in bankruptcy having been made, the court proceeds to take charge of the bankrupt's property, and administer the same for the benefit of the creditors, and determine all questions which may arise in regard to the rights of the bankrupt or the creditors, either as against the bankrupt or as between themselves in accordance with the above-prescribed powers. A trustee is appointed, either selected by the creditors at a meeting called for that purpose or, in case they fail to select a trustee, one is appointed by the Court. His duty is to collect the property, realize on the same in such manner as may be for the best interests of all concerned, and ultimately distribute the same among the creditors in such proportions as they may be adjudicated to be entitled thereto.

Referees.—As all questions, both of law and fact, in relation to the property or the rights of the various parties must be decided in the bankruptcy proceeding, it is provided that referees be appointed, who are charged with the duty of hearing the allegations and testimony of all parties and deciding all such questions that may arise. Each case, as it comes up, is assigned to some referee, whose duty it is to adjudicate and pass upon all such questions arising therein in the first instance, the right being reserved to any parties to appeal from the decision of the referee to the United States District Court.

The Duties of the Referee are substantially of a judicial character, and he occupies much the position of a judge of primary resort, subject to an appeal to the Court, and is required to take the same oath of office as that prescribed for judges of the United States courts. By Section 38 of the act, the referee is invested with jurisdiction to consider all petitions referred to him by the clerks, make adjudications or dismiss the petition; exercise the powers vested in courts of bankruptcy for the administering of oaths to and the examination of witnesses, and for requiring the production of documents in proceedings before him, except the power of commitment, and, in the absence of the Judge, to exercise all his powers for taking possession and releasing the property of a bankrupt, and to perform such part of the duties of the courts of bankruptcy as they may prescribe by rules and orders, excepting only questions arising on applications of bankrupts for compositions or discharges.

All questions in regard to the property or assets or rights of the creditors and persons interested come before the referee for hearing and determination, subject to the right of appeal. After the rights of all parties have been ascertained and determined, and the property has been realized upon, it is distributed among the creditors.

Notice to Creditors.—Detailed provisions are made in the act for giving notice to all creditors and other persons interested in

the estate of the pendency of the proceedings, the payment and declaration of dividends and other matters, and providing methods whereby all parties interested may be heard on all subjects arising in the course of the proceedings.

Compromises.—Provision is made in the act for allowing bankrupts to compromise or settle with their creditors by a proceeding known as composition proceedings, whereby, if a bankrupt and a majority of his creditors agree upon some basis of settlement, the same, if approved by the Court, shall become binding upon all creditors. The decision of the question as to the approval of compositions and granting discharges to a bankrupt from his debts is specifically reserved by the act to the judges of the United States courts; but the Court, by virtue of its general powers, may refer such matters to the referee to take testimony and report to the Court his opinion thereon.

Defense.—It is made a complete defense to any proceedings in bankruptcy to allege and prove that the party proceeded against was not insolvent at the time of the filing of the petition against him.

Duties of Bankrupts.—The bankrupt shall (1) attend the first meeting of his creditors, if directed by the court or a judge thereof to do so, and the hearing upon his application for a discharge, if filed: (2) comply with all lawful orders of the court: (3) examine the correctness of all proofs of claims filed against his estate; (4) execute and deliver such papers as shall be ordered by the court; (5) execute to his trustee transfers of all his property in foreign countries; (6) immediately inform his trustee of any attempt, by his creditors or other persons, to evade the provisions of this act, coming to his knowledge: (7) in case of any person having to his knowledge proved a false claim against his estate, disclose that fact immediately to his trustee: (8) prepare make oath to, and file in court within ten days, unless further time is granted, after the adjudication if an involuntary bankrupt, and with the petition if a voluntary bankrupt, a schedule of his property, showing the amount and kind of property, the location thereof, its money value in detail, and a list of his creditors, showing their residences, if known (if unknown that fact to be stated), the amount due each of them, the consideration thereof, the security held by them, if any, and a claim for such exemptions as he may be entitled to, all in triplicate, one copy of each for the clerk, one for the referee, and one for the trustee; and (9) when present at the first meeting of his creditors, and at such other times as the court shall order, submit to an examination concerning the conducting of his business, the cause of his bankruptcy, his dealings with his creditors and other persons, the amount, kind, and whereabouts of his property, and, in addition, all matters which may affect the administration and settlement of his estate; but no testimony given by him shall be offered in evidence against him in any criminal proceedings.

Provided, however, that he shall not be required to attend a meeting of his creditors, or at or for an examination at a place more than one hundred and fifty miles distant from his home or principal place of business, or to examine claims except when presented to him, unless ordered by the court, or a judge thereof, for cause shown, and the bankrupt shall be paid his actual expenses from the estate when examined or required to attend at any place other than the city, town, or village of his residence.

Costs.—The aim of the act has been to make the expense of the proceedings depend largely upon the amount of the property involved, and the compensation of the referees is fixed substantially at 1 per cent on the amount distributed to the creditors in ordinary cases, where the assets are distributed by the Court, and one-half of 1 per cent in composition cases, and the trustees who have charge of the actual management of the bankrupt's property receive as compensation such commissions on amounts paid out by them as dividends as the Court may allow, not to exceed, however, 3 per cent on the first \$5,000, 2 per cent on the second \$5,000, and 1 per cent on all sums in excess of \$10,000.

Discharge of Debtor.—Any person may, after the expiration of one month and within the next twelve months subsequent to being adjudged a bankrupt, file an application for a discharge, or if it shall be made to appear that the bankrupt was unavoidably prevented from filing such application within said time, it may be filed within the next six months. The judge shall hear the application for discharge, and all such pleas and proofs as may be made in opposition thereto. Applicants are to be discharged unless they have committed offenses punishable by imprisonment, as provided in the act, or with fraudulent intent to conceal their true financial condition and in contemplation of bankruptcy, destroyed, concealed or failed to keep books of account or records from which their true condition might be ascertained.

The confirmation of a composition shall discharge the bankrupt from his debts, other than those agreed to be paid by the terms of the composition, and those not affected by a discharge.

Discharges may be revoked on the ground of fraud.

Liability of Co-Debtor or Surety.—The liability of a person who is a co-debtor with, or guarantor, or in any manner a surety for a bankrupt, shall not be altered by the discharge of such bankrupt.

Effect of Discharge.—A discharge in bankruptcy shall release a bankrupt from all his provable debts, except such as are due as a tax levied by the United States, the State, county, district, or municipality in which he resides; judgments in actions for fraud, or obtaining property by false pretenses or false representations, or for willful and malicious injuries to the person or property of another; debts which have not been duly scheduled in time for proof and allowance, with the name of the creditor, if known to the bankrupt, unless such creditor had notice or actual knowledge of the proceedings in bankruptcy; or debts which were created by his fraud, embezzlement, misappropriation, or defalcation, while acting as an officer or in any fiduciary relation or capacity.

BONDS

A Bond is an instrument in writing whereby one person binds himself (or several persons bind themselves) to another or others to pay a sum of money, to abide by an award, or to do some lawful act, or not to do some particular thing or things specified in the condition of the bond.

Names of Parties.—The person who gives the bond and so binds himself is called the *obligor*, the person receiving the bond is called the *obligee*.

Kinds of Bonds.—If there is no stipulation in the bond that the obligor shall suffer any penalty in case of nonperformance, the bond is called a *simple* one. But there generally is a condition added that if the obligor does some particular act, the obligation shall be void, or else shall remain in full force, as payment of rent, performance of covenants in a deed, or repayment of a principal sum of money borrowed of the obligee, with interest; which principal sum usually is one-half of the penal sum specified in the bond.

BONDS 197

Seal Required.—Bonds, at common law, must be under seal, the seal making proof of consideration unnecessary.

Forfeiture.—In case of a failure to perform the condition, the obligee can recover only his principal, interest, and expenses, if the bond was given to secure the payment of money; and if given to secure the performance of a covenant, he can recover only reasonable damages for the breach.

Action On.—Bonds belong to the class of obligations known as *specialties*, and, like other sealed instruments, are in force by statute in most of the States for twenty years, or during such time as the special statute of the State may provide.

Form of Simple Bond

Know all Men by These Presents, That I, William Jenkins, of the city of Dallas. State of Texas, am held and firmly bound unto James Stevens, of the city and State aforesaid, in the sum of Five Hundred Dollars, lawful money of the United States, to be paid to the said James Stevens, or his assigns; to which payment, well and truly to be made on or before the first day of May 1905, I bind myself, my heirs, executors, and administrators, firmly by these presents.

In Testimony Whereof, I, William Jenkins, have set my hand and seal to this instrument on the first day of March, in the year of our Lord one thousand nine hundred and four.

WILLIAM JENKINS. [SEAL]

Executed and delivered
in presence of
WILLIAM RODGERS,
LOUIS WOODS.

General form of Bond, with Condition

Know all Men by These Presents, That I, John Taylor, of Lincoln, in the county of Logan, State of Illinois, am firmly bound unto Harvey Newman, of the place aforesaid, in the sum of One Thousand Dollars, to be paid to the said John Taylor, or his legal representatives; to which payment, to be made, I bind myself, my heirs, executors, and administrators firmly by these presents.

Sealed with my seal. Dated the fifth day of June, A. D. 1904.

The condition of the above obligation is such that, if the above bounden John Taylor, his heirs, executors, or administrators, shall promptly pay the sum of Five Hundred Dollars in four equal annual payments from the date hereof, with annual interest, then the above obligation to be of no effect; otherwise to be in full force and valid.

JOHN TAYLOR. [SEAL]

Signed, sealed, and delivered in presence of RICHARD LOW.

Bond to a Corporation

Know all Men by These Presents, That I, Chas. Greene, of Terre Haute, Vigo County, State of Indiana, am firmly bound to the Terre Haute Plow Manufacturing Company in the sum of Ten Thousand Dollars, to be paid to the said company, or their assigns, for which payment, to be made, I bind myself and representatives firmly by these presents. Sealed with my seal. Dated this third day of June, 1904. The condition of the above bond is such that, if I, the said Chas. Greene, or my legal representatives, shall pay unto the Terre Haute Plow Manufacturing Company, or assigns, Five Thousand Dollars in two equal payments, viz: Two Thousand Five Hundred Dollars March 1st, 1905, and Two Thousand Five Hundred Dollars July 1st, 1905, then the above to be void; otherwise to be remain in full force and effect.

Chas. Greene. [Seal]

Signed, sealed and delivered in presence of FRED BROWN.

Bond of Indemnity

Know all Men by These Presents, That I, Phillip Barrows, of Richmond, Virginia, am held and firmly bound unto Warren Hazelteen, of the same place, in the sum of Two Thousand Dollars, to be paid to the said Warren Hazelteen, his executors, or administrators, for which payment, well and truly to be made, I do bind myself, my heirs, executors, and administrators firmly by these presents.

Sealed with my seal. Dated this 10th day of February, 1904.

Whereas, Warren Hazelteen is about to employ my nephew, Harry R. Hall, as cashier in his store, for the term of one year from March 1st, 1904.

Now the condition of this obligation is such that if the said Harry R. Hall shall fully perform all the duties of his said employment, and promptly and correctly account for and pay over all the money or property of the said Warren Hazelteen which may come into his hands during its course, then this obligation shall be void; otherwise to remain in full force.

PHILLIP BARROWS. [SEAL]

Signed, sealed and delivered in presence of
HIRAM JONES,
WILLIAM SMITH.

BROKERS

A Broker is an agent who is employed to transact business for others. His province is to find buyers and sellers and bring them together to make their bargains, or to transact for them the business of such buying and selling. In law, he is regarded as a middleman, or intermediate negotiator between the principals on both sides of the negotiation conducted by him.

Classes of Brokers.—Brokers are divided into different classes, according to the nature of the property in which they deal.

Bill and Note Brokers are those who buy and sell for others drafts, bills of exchange, and notes.

Exchange Brokers buy and sell uncurrent money, and deal in exchanges relating to money in different countries.

Insurance Brokers act for the owners of property in obtaining insurance upon it, settling losses, etc.

Merchandise Brokers buy and sell property, known as merchandise, for others.

Pawnbrokers, though called brokers, are really principals.

Real Estate Brokers buy and sell real estate or mortgages on real estate for others.

Shipping Brokers deal with the purchase and sale of vessels, procure freights, etc.

Stock Brokers buy and sell for others the stock and bonds of railroads, etc.

MERCHANDISE BROKER'S FORMS

Memorandum to be Given to the Seller

New York, December 10, 1904.

MESSRS. WHITE, LUDLOW & Co.,

41 Broadway.

We have sold to-day on your account to William Holsworth, 450 22d St., the following goods: 1,000 ounces Sulphate of Quinine B. and G. at \$2.75 per ounce.

MERRIAM & CHAPIN. Brokers.

Memorandum to be Given to the Buyer

New York, December 10, 1904.

Mr. Wīlliam Holsworth, 450 22d St.

We have to-day for your account, from White, Ludlow & Co., the following: 1,000 ounces Sulphate of Quinine B. and G. at \$2.75 per ounce.

Respectfully.

MERRIAM & CHAPIN, Brokers.

COMMISSION MERCHANTS

A Commission Merchant is one to whom goods are sent for sale, and who charges a certain per cent on the price of the goods sold for his service, which is called *commission*.

Farmers and manufacturers who have large quantities of goods to sell send them to the cities to the commission merchant, who sells them for them.

Commission merchants are, therefore, agents to sell and the owners of the goods are their principals. These duties and responsibilities are in general like those of other agents.

Duties.—The whole business is one of contract for personal services. The merchant's chief aim is to sell the goods for the best price he can get, and pay over the money when collected, after he has deducted his commission. He must obey the orders of his principal, conduct the business skillfully and carefully, and render true accounts when called upon. He must not make his own interests averse to those of his principal.

Authority.—This is as conferred upon him by special agreement, but often the commission merchant is left to conduct the business according to his own judgment and in the way such business is usually conducted.

Responsibility to Principal.—If he violates in any way the agreement, disobeys instructions, or is negligent, then he is responsible to his principal for any loss that may result from it.

When left to exercise his own judgment, he is not responsible for any loss that may result from making a mistake.

If he be given authority to sell on credit, and the buyer fails to pay, the owner must lose, not the commission merchant.

The Commission.—To this he is entitled when he has performed his service. When selling on credit, he is entitled to his commission when the sale is effected, whether the principal gets his pay or not.

But if in any way he breaks his contract, he loses his claim to any commission on that transaction.

Guaranty Commission.—Sometimes the commission is, by agreement, made to guarantee payment by the party to whom the goods are sold. In such cases he is responsible to the owner if the buyer does not pay.

Advances.—Frequently the commission merchant advances to the owner, before he has made any sales, some portion of what he thinks the goods are worth.

When the sale is made he deducts this amount, with his commission, from what he realizes from the sale.

Lien upon Goods.—His principal can revoke his authority and take his goods away at any time, but if the merchant has in the meantime incurred any expense he can hold the goods until his expenses or outlays are made good.

The rule in law is: A commission merchant has a right to keep any goods of his principal's which are in his hand until

he has been paid all commission, advances and expenses due him from the owner.

By this general lien he can keep any goods, whether the debt arose in connection with them or with others.

Relation to the Buyer.—If the owner of the goods is made known to the buyer, then the commission merchant assumes in general no responsibility himself, but if he says nothing about who owns the goods, or sells them as his own, acting as principal, he assumes all the responsibility of the principal.

CORPORATIONS

A Corporation is a body created by law, composed of individuals united under a common name, invested with certain powers and functions, and perpetuated by a succession of members, so that the body continues the same notwithstanding the change of the individuals who compose it.

How Created.—Corporations are created by special character of the legislature, or formed by voluntary association of members under a general law. The necessary forms for organizing a corporation under the laws of the different States are usually to be had on application to the Secretary of State, and serve as a guide to the proper steps to be taken to effect an incorporation.

The Charter is the instrument embodying the rights and privileges granted to the incorporated body.

The Capital Stock is the money paid in to carry on the business of the corporation.

A Share is one of the equal parts into which the stock or capital is divided.

Stockholders are the owners of one or more shares of stock.

A Certificate of Stock is a written statement setting forth the number and value of the shares to which the holder is entitled.

The Par Value of stock is the amount named as each share; it is also called the *nominal* value.

The Market Value is the sum for which shares will sell. They are said to be at par when they sell at their nominal value, above par, or at a premium, when they sell for more, and below par when they sell for less than their nominal value.

The Premium or Discount on stock is computed at a certain per cent on the original nominal value of the shares.

Preferred Stock is given to secure some obligation of the cor-

poration and takes preference of the ordinary or common stock, and the holders are entitled to a fixed per cent out of the earnings of the corporation before a dividend can be declared on the common stock.

Dividends are the declared shares of the profits due the stock-holders after all expenses have been paid.

How Corporations Act.—A corporation acts through its officers or authorized agents. Its business must be done in its corporate name and in harmony with its charter.

Seal.—Every corporation is required to have what is called a corporate seal, which consists of an engraved stamp bearing some device or inscription identifying the corporation, and an impression of this seal is required to be attached to certain written instruments executed by the corporation. Its use is not necessary in ordinary business transactions, but only in the execution of solemn instruments, such as deeds, bonds, mortgages, etc.

Liability.—Corporations are liable for contracts made by their duly authorized agent within the scope of his authority, as well as for trespasses or torts committed by such agent under authority of such corporations.

The stockholders are individually liable to the corporation's creditors to extent fixed by statute under which the company is incorporated. Usually they are not made liable beyond the amount of stock held by them.

Suits By and Against.—A corporation may be plaintiff or defendant in a suit at law or in equity. The notice or summons is served upon any of the executive officers.

Guaranteed Stock is stock upon which a certain dividend is guaranteed.

Watered Stock is stock issued to shareholders without any increase of the actual capital of the corporation. Sometimes the charter of a corporation forbids the declaring of a dividend exceeding a certain per cent of the par value of the stock. In this case the directors may find it desirable to "water" the stock, that is, issue additional shares. This increase in the number of shares of course reduces the percentage of dividend, although the same profit, in the aggregate, is secured to the stockholders.

Corporations of One State may do Business in Another.—As a general rule corporations organized under the laws of one State are privileged to do business in other States, and this fact is taken advantage of by persons who desire to organize with a small paid up capital and wish to do business in a State that requires a large proportion of the capital to be paid up. For instance, a company can organize in Maine for \$100,000 on a paid up capital of \$25 and do business in a State that requires a large proportion of the capital stock of corporations organized therein to be paid up. This is why many corporations doing business in the large cities of Massachusetts, New York, etc., are organized under the laws of New Jersey.

Dissolution of Corporations.—Corporations are in theory immortal, but practically they can be terminated in various ways. If a corporation violates its charter, it loses the right to continue its existence. It may also be terminated by an act of the legislature when the law that created it has reserved the right to dissolve or to abolish it. A corporation limited as to time is of course dissolved at the expiration of such time.

When dissolved, the debts of the corporation must be paid out of the assets, and what remains beyond that is divided among the stockholders.

Land Granted to a Corporation reverts back to the grantor when it is no longer used for the purpose for which it was granted. If used for another purpose, or not used at all, the grantor can claim it as forfeited.

The Stock Exchange is a place where "stocks," or in other words, securities of governments, railroads and other corporations, are bought and sold. The London and New York stock exchanges are the chief associations of their kind in the world.

Stock exchanges perform a number of useful functions, only a few of which can be indicated here. The body of dealers find it convenient, if not necessary, to have a place where they may meet to transact business among themselves. Here they have the advantage of the latest intelligence, of the exchanges themselves, from all the leading associations of the same kind throughout the world. The result is that, owing to the keen competition of the buyers and sellers, prices are promptly adjusted to existing conditions of supply and demand, and excessive and ruinous fluctuations in the prices of securities are thus obviated. The declaration of a good or bad dividend on mining or railroad shares, the report of an increase or decrease in the output or traffic in the concern often brings about an undue exaltation or depreciation in the market value of its securities. The stockbroker or dealer in the case of an undue confi-

dence sells his shares freely, and thus arrests the rise. In case of an irrational panic he buys largely and thus arrests a fall.

The original cost of a seat in the New York Stock Exchange was \$400. Prices now range from \$50,000 to \$80,000 per seat.

Trusts.—A trust, strictly speaking, is an organization for the control of several corporations under one direction, usually effected by the device of a transfer, by the stockholders in each of the corporations concerned, of at least a majority of the stock to a central committee, or board of trustees, which issues in return, to such stockholders, respectively, certificates showing in effect that although they have parted with their stock and the consequent voting power, they are still entitled to dividends, or to their share in the profits.

The word "trust," however, has come to have a much broader application, and as now commonly understood means "any consolidation, combine, pool, or agreement of two or more competing concerns, which establishes a limited monopoly, with power to fix prices or rates in any industry or group of industries."

National and State laws have recently been passed making some of the more objectionable forms of trusts unlawful and subjecting the others to State supervision and control.

Form of Application for Incorporating

STATE of ILLINOIS, \ Ss.

City of Springfield, \ Ss.

To _____, Secretary of State:

We, the undersigned, Chas. Williams, Walter Baker, and Howard Calhoun, propose to form a corporation under an act of the General Assembly of the State of Illinois, entitled "An Act Concerning Corporations," approved April 18, 1872, and all acts amendatory thereof, and that for the purpose of such organization we hereby state as follows, to wit:

- 1. The name of such corporation is the Springfield Glove Manufacturing Company.
- 2. The object for which it is formed is to carry on the business of manufacturing gloves in all its branches, and to sell the product so manufactured.
- 3. The capital stock shall be Three Hundred Thousand ($\$300\ 000$) Dollars.
 - 4. The amount of each share is One Hundred (\$100) Dollars.
 - 5. The number of shares three thousand (3,000).
 - 6. The location of the principal office is in Springfield, State of Illinois.
 - 7. The duration of the corporation shall be seventy (70) years.

CHAS. WILLIAMS. WALTER BAKER, HOWARD CALHOUN.

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The document must bear the following:

Indorsement on the Back

STATE OF ILLINOIS, City of Springfield,

I, Charles Phillips, a notary public in and for the said c ty of Springfield, and State aforesaid, do hereby certify that on this 15th day of March, A. D. 1904, personally appeared before me Chas. Williams, Walter Baker, and Howard Calhoun, to me personally known to be the same persons who executed the foregoing statement, and severally acknowledged that they executed the same for the purposes therein set forth.

In witness whereof, I have hereunto set my hand and seal the day and year above written.

CHARLES PHILLIPS,
Notary Public.

DEEDS

A Deed is an instrument in writing and under seal, whereby real estate or some interest therein is conveyed.

The Seal required by the common law consists of an impression upon wax, wafer or other tenacious substance, but in some of the States a scroll or circle made with a pen around the word seal or in place of the seal is sufficient. In some States no seal is required except in case of deeds by corporations.

Names of Parties.—The maker of the deed is called the *grantor*, the party to whom it is delivered the *grantee*.

Requisites of a Valid Deed.—1. Competent parties. 2. Consideration. 3. The deed must be reduced to writing. 4. It must be duly executed and delivered. If signed by an agent or attorney, the seal should be that of the principal, and the authority of the agent to use the seal should itself be under seal. To be effective against third parties it must be duly acknowledged and recorded. (See Acknowledgments.)

The Consideration on which the deed is based may be either good (as for love and affection), or valuable (as for money or other property). It is customary, though not necessary, to mention some nominal sum, as one dollar, even when no money price is paid.

The Property to be conveyed should be described by boundaries as minutely as possible.

When Wife Must Join.—If the wife's dower or homestead is to be released, she must join with the husband in the deed. A husband and wife may, by a joint deed, convey the real estate of the wife; and in some of the States her acknowledgment must be taken apart from her husband. (See Acknowledgments.)

Acknowledgment.—The mode and effect of an acknowledgment or of a deed is governed by the law of the State where the land lies, and not by that of the place where the acknowledgment is taken. Where the deed is executed by an attorney in fact, it is customary to have the power of attorney acknowledged by the principal and the deed acknowledged by the attorney.

Separate Acknowledgment by wife is required in Alaska, Arkansas, Delaware, District of Columbia, Florida, Georgia, Idaho, Kentucky, Louisiana, Montana, Nevada, New Jersey, North Carolina, Oregon, Pennsylvania, South Carolina, Tennes-

see, and Texas.

Witnesses.—It is always best that the execution of the deed should be witnessed, even though not required by statute. A witness should have no interest in the deed. Therefore a wife is not a proper witness of a deed to her husband. One witness to the execution of deeds is required in District of Columbia, Maine, Maryland, Nebraska, New Jersey, Oklahoma, Utah, Wyoming. Two witnesses to the execution of deeds are required in Arkansas, Connecticut, Florida, Georgia, Louisiana, Michigan, Minnesota, New Hampshire, Ohio, Oregon, South Carolina, Texas, Vermont, and Wisconsin. If witnesses die, proof of their handwriting will be admitted; if this cannot be obtained, proof of the grantor's handwriting is sufficient.

The Estate Passes upon the actual delivery of the deed. If it is retained until the grantor's death, it becomes void and of no effect. But where it is delivered to a third person to transfer to the grantee upon the happening of some event, as the death of the grantor, the estate will pass upon that final delivery. Such a deed is called an *escrow*.

* Recording.—The object of the public recording of a deed is not to give validity as between the grantor and grantee, but to protect the grantee against subsequent bona fide purchasers or mortgagees, and against the grantor's creditors.

Summary.—Deeds should be signed, sealed, witnessed, acknowledged, delivered, and recorded.

Caution.—Do not purchase real estate without first carefully examining the title, and always procure an abstract of title before advancing money or signing contract for purchase of property.

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DIFFERENT KINDS OF DEEDS

A Warranty Deed is so called because the grantor covenants to warrant and defend lands mentioned against all persons, and to the extent specified.

A General Warranty covenants and warrants against all persons whoseever.

A Special Warranty covenants and warrants only against one person, his heirs and those claiming under him.

A Quit Claim Deed is one which conveys all the interest which the grantor possesses, whatever it may be in the lands specified, without containing any warrants. By it the grantor merely quit claims any interest he may have, but does not warrant his title.

A Trust Deed conveys property to persons to hold for the use of some other person who is entitled to the proceeds, title, or use of the property.

Tax Deeds are made by a public officer after sale of the land for non-payment of taxes. They differ from common deeds in that they do not in themselves transfer title. That is to say, any irregularity or illegality in the sale or other proceedings on which the deed is based will invalidate the deed itself. In many States the grantee of such a deed holds the property subject to the right of the owner to redeem it within a specified time, by paying taxes, costs and interest on the purchase money, at a fixed rate, greater than the usual rate of interest.

Deeds by Executors, Administrators, or Guardians generally contain no warranty; and every requisition of the law must be complied with to give a good title.

Forms of Deeds conveying land are prescribed by some States, and such form should generally be used.

Warranty Deed

This Indenture, made this tenth day of April, in the year of our Lord one thousand nine hundred and four, between Howard Denman and Mary Denman, his wife, of the village of Bristol, in the County of Morgan, State of Ohio, party of the first part, and William A. Martin, of the City of Columbus, in the County of Franklin, and State of Ohio, party of the second part,

Witnesseth, That the said party of the first part, for and in consideration of the sum of Five Thousand (\$5,000) Dollars, in hand, paid by the said party of the second part, the receipt whereof is hereby acknowledged, have granted, bargained, sold, remised, released, conveyed, aliened, and confirmed, and, by these presents, do grant, bargain, sell, remise, release, convey, alien, and

confirm unto the said party of the second part, and his heirs and assigns forever, all that certain piece, or parcel, of land situated and being in the Village of *Bristol*, County of *Morgan*, and State of *Ohio*, and described as follows, to wit:

The Northeast Quarter of Section Fifteen (15), in Township Twenty-eight (28), South of Range Nine (9), West of the Fourth Principal Meridian, containing One Hundred and Fifty acres by government survey.

Together with all and singular the hereditaments thereto belonging or in any way appertaining, To Have and to Hold the said premises as described, with the appurtenances, unto the said party of the second part, and to his heirs and assigns forever. And the said party of the first part, their heirs, executors, and administrators, do covenant, grant, bargain, and agree to and with the said party of the second part, his heirs and assigns, that at the time of the ensealing and delivery of these presents they are well-seized of the premises above conveyed, as of a good, sure, perfect, absolute, and indefeasible estate of inheritance in law, in fee simple, and have good right, full power and lawful authority to grant, bargain, sell, and convey the same in manner and form aforesaid; that they are free from all other grants, bargains, sales, liens, taxes, assessments, and encumbrances of what kind or nature whatsoever, and that they will, and their heirs, executors, and administrators shall warrant and defend the same against all lawful claims whatsoever.

In Witness Whereof, The said party of the first part have hereunto set their hands and seals the day and year first above written.

HOWARD DENMAN, [SEAL]
MARY DENMAN. [SEAL]

Signed, sealed and delivered in the presence of
H. R. MOYER.
B. J. SLICK,

[To be duly acknowledged and recorded.]

Quit Claim Deed

This Indenture, made the first of March, in the year of our Lord one thousand nine hundred and four, between James R. Ward and Louise L. Ward, his wife, of Hastings, Barry County, State of Michigan, parties of the first part, and Myer A Walker, of Richland, County of Kalamazoo, State of Michigan, party of the second part,

Witnesseth, That the said parties of the first part, for and in consideration of the sum of One Dollar to them in hand paid by the party of the second part, the receipt whereof is hereby confessed and acknowledged, do, by these presents, grant, bargain, sell, remise, release, and forever quit claim unto the party of the second part, and to his heirs and assigns forever, all that certain piece, or parcel, of land situated and being in the County of Barry and State of Michigan, and described as follows, to-wit:

The Southwest quarter of Section number Nine, in Township number Three, South of Range number Five, West, containing One Hundred and Fifty Acres of Land, be the same more or less. *Together* with all and singular the hereditaments and appurtenances thereto belonging, or in anywise appertaining. *To Have and To Hold* the said premises, as above described,

to the said party of the second part, and to his heirs and assigns, to the sole and only proper use and benefit of the said party of the second part, his heirs and assigns, forever.

In Witness Whereof, The said parties of the first part have hereunto set their hands and seals the day and year first above written.

JAMES R. WARD, [SEAL] LOUISE L. WARD. [SEAL]

Signed, sealed, and delivered in the presence of WALTER R. WING,
CHAS. COMMONS.

[To be duly acknowledged and recorded.]

EMPLOYER AND EMPLOYEE

RELATIVE RIGHTS AND OBLIGATIONS OF

An Agreement to work for another is a very common kind of contract in business life. (See Contracts.)

There are two general kinds:

1. To do some particular thing.

2. To do whatever the employer may direct.

Brokers, commission merchants, lawyers, tradesmen and many others belong to the first class; clerks and all others employed to do general work belong to the second class.

The act of employing in both classes is a contract in which each party agrees to do a certain thing.

The Compensation.—All agreements to employ contain a promise to pay for the services rendered, which promise is either expressed or implied.

When services are requested there is always an implied promise to pay what they are worth, that is to say, the price usually paid by others for such services.

Employee's Agreement.—The person employed to do a certain work must fulfill his agreement, but he need not do anything else. It is an implied part of every agreement to render services that the work will be done with ordinary skill, care and diligence. A failure in this makes the employee forfeit his compensation, no matter how much he has done. If another does the work, the party to the agreement is in all respects responsible for the work done.

Loss or Injury.—When one has another's property in his possession he is expected to take all possible care of it; if through his carelessness it is lost or injured the careless one is not only

not entitled to any compensation for what work he has done, but must compensate the owner for his loss or injury. For losses occasioned otherwise he is not responsible. (See *Bailments*.)

Length of Employment.—Where in the second class a person is employed to perform a certain class of duties, the time for which he is hired is an important element, whether that time be a day, a week, a month, a year or longer. When no time of service is specified, the time when payment is made will indicate the length of employment. Thus, if a clerk, messenger, etc., is hired for no fixed time, but at so many dollars a week, or a month, it is a hiring for a week or a month, respectively. If the work continues the next week or month in the same manner, it is a new contract on the same terms.

Discharge of Employee.—An employee may be discharged at the end of his time without any cause or previous notice. If hired at so much per week and for no definite time he may be discharged at the end of any week, or even during the week, and he has no right to insist upon working after he is discharged. If, however, the discharge is without good cause, i. e., if the work is all right, he is entitled to payment for the whole period. If, on the other hand, there was good reason for the discharge, arising from his own fault, he is entitled to no pay for any of that period.

Leaving Services.—An employee can leave at the end of the time without giving notice. But if he leaves before the expiration of the time he is entitled to no pay for that period, no matter how much of the time he has worked.

Thus, if he agreed to stay a month and left at the end of three weeks he would be entitled to nothing. The general rule applies here as elsewhere. Each party must keep his part of the contract if the other does, but need not if the other does not. (See Contracts.)

GUARANTY

A Guaranty is a promise or undertaking to pay the debt of another in case the latter does not pay it.

Names of Parties.—The person who makes the promise is called the *guarantor*, the person in whose behalf the promise is made, the *principal*, and the person to whom the promise is made, the *guarantee*.

Who are Guarantors.—Every surety is a guarantor, and every indorser of a negotiable instrument is in fact a guarantor, but with peculiar rights and duties not known to common guarantors. (See Negotiable Notes.)

Consideration.—Like every other binding promise a guaranty must be founded upon a good consideration, but it is sufficient, however, if the person for whom the guarantor becomes surety receives a benefit, or the person to whom the guaranty is given suffer inconvenience, as an inducement to the surety to become guarantor for the principal.

Must be in Writing.—Being a promise to pay a debt of another, a guaranty is required to be in writing (see Contracts). But where one who promises to pay the debt of another receives therefor an independent consideration, the promise is deemed a promise to pay his own debt, and need not be in writing. Thus, if two parties go together into a shop or warehouse, and upon one selecting and giving an order for goods, the other engages verbally to pay for those goods in case the other does not, in whatever form of words that promise is given, he is not bound by it—it must be reduced to writing and signed by the guarantor. But if the guarantor tells the merchant that he will be responsible for goods purchased by the other and assents to having the goods charged to himself, the promise need not be in writing to bind the guarantor.

Any Material Change in the extent, terms, or character of the principal's liability discharges the guarantor, even though the change be in no way injurious to him. He may assent to it, however, and will then be liable.

Where there are several guarantors, and one of them is obliged to pay the debt, he can look to the others for their proportion.

Indemnity.—A guarantor ought to take care to be indemnified against loss, in the event of being called on to pay the debt. With this view indemnities are given (frequently, but not always or necessarily, by bond), holding harmless him who, under an undertaking to be responsible for the debt or engagements of another, becomes chargeable or liable for the debt.

Guaranty Companies.—There are companies which transact a guaranty or surety business, from whom, for a consideration, persons on assuming a place of financial responsibility where an indemnity bond is required, can obtain the necessary bond.

Guaranty for the Performance of a Contract

For a good and valuable consideration, by us received, we, the undersigned, do hereby guarantee a faithful compliance with the terms of the above (or within) agreement upon the part of the said contractor, Richard Unger.

Done at Elkhart, Elkhart County, State of Indiana, this 15th day of November, A. D. 1904.

WALTER HANKINS, [SEAL] FRANK KLINE. [SEAL]

Signed, sealed, and delivered in the presence of
WILLIAM LOWER,
CHARLES ANDREWS

Guaranty for the Purchase of a Horse

Omaha, Nebraska, January 2, 1904.

In consideration of One Hundred and Twenty-five Dollars for a black mare, I hereby guarantee her to be only five years old, sound, free from vice, and easy to ride or drive.

Chas. Howland.

[N. B.—In this guaranty the seller will be held for all the defects in the animal at the time of sale. 'This is the safest way for one who is not an experienced judge of horses to purchase one.]

Guaranty for a Debt Not Yet Incurred

Rochester, N. Y., March 10, 1904.

Messes. Sanford & Barth, Buffalo.

Gentlemen: The bearer of this, Mr. R. J. Walker, of this city, is on the point of visiting your city for the purpose of buying goods, and desires articles in your line. He is considered worth some thirty thousand dollars, and such is our confidence in his ability and integrity, that we hereby guarantee the payment of any bills which he may make with you during this year, to an amount not exceeding five thousand dollars.

Yours respectfully,

WILLIAMS & RYAN.

Guaranty of a Debt Already Incurred

Reading, Pa., July 9, 1904.

THE PITTSBURG MANUFACTURING Co., Pittsburg.

Gentlemen: In consideration of One Dollar, paid by yourselves, the receipt of which is hereby acknowledged, I guarantee that the debt of three hundred dollars, now owing to you by Henry Wilcox, shall be paid at maturity.

Yours truly.

CHAS. SUNDERLAND.

INSURANCE

Definitions.—Terms Employed.—Insurance is a contract by which one of the parties, called the *insurer*, binds himself to the other, called the *insured*, to pay him a sum of money or otherwise indemnify him in case of the happening of a fortuitous event, provided for in a general or special manner in the contract, in consideration of a certain sum of money called a *premium*, which the latter pays or binds himself to pay him.

The Instrument of writing by which the contract is made is called a *policy*, the events or causes to be insured against *risks* or *perils*, and the thing insured the *subject-matter* or *insurable interest*.

Kinds of Insurance.—Insurance is divided generally into three kinds: fire, marine, and life—the last including accident insurance as a branch.



FIRE INSURANCE

Fire Insurance includes all undertakings to indemnify the insured against losses by fire, whether upon buildings, ships, or the goods and stock contained therein, or live stock.

What Property may be Insured.—Every kind of property may become the subject of insurance, unless, from motives of public policy, it has been prohibited by law. Insurances are most commonly made on buildings, goods, merchandise, freight, bottomry, loans, profits and commissions.

Who may Insure.—A person in order to secure a valid policy must have an interest in the property insured. It is not neces-

sary, however, that a person should be the owner of the whole or a part of the property in order to enable him to effect an insurance thereon. It is sufficient if he is directly interested in its safety. A person, therefore, has an insurable interest in any property when he is so circumstanced with respect to it, that its loss will be prejudicial to him.

Increasing Risk.—The amount of premium is based upon the degree of danger there is of fire. The insured must, therefore, not increase the risk; if he does the policy becomes void. No change should be made without notifying the insurance company and obtaining its consent.

Changes made after the policy is issued, for which the insured is not responsible, will not affect the contract.

Conditions in the Policy.—All policies contain certain additional agreements, such as: that no gunpowder or gasolene shall be kept on the premises insured; that they shall not become vacant, or that if any other insurance is added the company be notified.

Misrepresentations on the part of the owner as to the character of the property or the danger to which it may be exposed make the policy void.

Negligence.—A fire caused by negligence does not exempt the company from paying the loss, unless the negligence is so great as to be criminal or to indicate fraud.

Proof of Loss.—In order to recover amount of insurance the insured, after the loss of property by fire, must prove the quantity and value of the goods so lost, and also the injury sustained on goods not burned by reason of water used in attempting to extinguish the fire, and must make such affidavits and produce such certificates as the terms of the policy require, and cause the same to be filed in the office of the company within the time specified in the policy of insurance.

Amount Paid.—The amount to be paid in fire insurance is the amount of the loss, unless the loss exceeds the amount of the policy. The company never pays more than the policy. Thus if the policy is for \$3,000 and the loss is \$300, it pays \$300 and the policy becomes \$2,700. If the policy is \$5,000 and the loss \$6,000, the company pays only the \$5,000 and the policy is discharged.

Valuation is sometimes made in policies upon chattels of uncertain value, as books, plate, or works of art, and if a loss happens the insured is entitled only to actual indemnity.

Rebuilding.—Insurers against fire usually stipulate that they may rebuild or repair the premises insured, if they prefer, and they frequently avail themselves of the right.

Transfer of Policy.—A policy of insurance is not negotiable; yet if it is transferred for value in good faith, the transfer may be so far valid as to give the assignee a right to sue, subject to any equitable defenses which could be made against the insured.

The insurance policy does not go with the property when sold, but must be conveyed separately with the consent of the company.

Fire Insurance Policy-The Main Clause

No. 420,745.

\$5,000.

The Hartford Fire Insurance Company, of Hartford,

In consideration of forty dollars, do insure Chas. A. Barrows against loss or damage by fire to the mount of five thousand dollars as follows:

On certain books, engravings, steel and copper plates, and other merchandise now contained in the building at No. 425 Lincoln Street, Boston.

And the said company hereby agree to make good unto the assured, his executors, administrators, and assigns, all such immediate loss or damage (not exceeding in amount the sum insured) as shall happen by fire to the property above specified, from the 15th day of January, 1904, at noon, to the 15th day of January, 1905, at noon, the amount of such loss and damage to be proven and paid, or made good according to the following terms and conditions:

(Here follow ordinarily a large number of additional clauses.)

In witness whereof we have caused this policy to be attested by the president and secretary of the company the 10th day of January, 1904.

WM. R. STANFORD,

WALTER E. CLARKE,

Secretary.

President.

[SEAL]

Renewal of Fire Insurance

Hartford, Conn., January 15, 1905.

The Hartford Insurance Company,

Do insure Chas. A. Barrows, in consideration of forty dollars, being the premium on five thousand dollars; this being a renewal of policy No. 420,745, which is hereby continued in force for one year, to wit, from January 15, 1905, to January 15, 1906, at noon.

WILLIAM R. STANFORD, Secretary.

Walter E. Clarke, President.

[SEAL]

Assignment of Policy

Know all Men by These Presents, That I, the within named Chas. A. Barrows, for and in consideration of the sum of Fifty Dollars, to me paid by Charles Dana, of Boston (the receipt whereof is hereby acknowledged), have granted, sold, assigned, transferred, and set over, and by these presents I do absolutely grant, sell, assign, transfer, and set over to him, the said Charles Dana, all my right, property, interest, claim, and demand in and

to the within policy of insurance, which have already arisen, or which may hereafter arise thereon, with full power to use my name so far as may be necessary to enable him fully to avail himself of the interest herein assigned, or hereby intended to be assigned. The conveyance herein made, and the powers hereby given, are for myself and my legal representatives to said Charles Dana and his legal representatives.

In testimony whereof, I have hereunto set my hand and seal, this tenth

day of May, A. D. 1905.

CHARLES A. BARROWS. [SEAL]

Executed and delivered in the presence of William Spencer.

MARINE INSURANCE

Marine Insurance is a contract to pay the owner of a ship and its cargo certain portions of his loss, if it is damaged or destroyed while at sea.

The Premium is often paid by a series of notes called *premium* notes. The policy is valid whether the notes are paid or not.

The Amount of the policy may be any fixed sum, namely, the loss the company shall be responsible for. The amount to be paid is that proportion of the loss which the amount of the policy bears to the value of the property. Hence the company does not pay the whole of the loss unless the policy equals the value of the property.

If property is insured to only half its value the company pays

only one-half the loss.

If policies have been obtained in several companies each company pays its proportion of the loss in the same proportion as though it were the only company. Whether there are one or many policies the amount to be paid by any one company is found by the following proportion: As the value of the property is to the amount of its policy, so is the amount of the loss to the share it must pay.

A Time Policy is one framed to cover possible loss within a specified time. This may be a year or certain months of a year.

Other policies cover only the risk in a certain voyage.

When the insurance is for a certain voyage, the place of sailing and that which is to be the termination of the voyage must be specified, and the voyage must be by the ordinary course from the one port to the other unless deviation is allowed by the terms of the policy. If the vessel does not enter upon the contemplated voyage the premium need not be paid, and if paid must be returned.

Risk Assumed.—The risk provided against is not only that of fire, but also the other extraordinary perils attending a sea voyage, such as the perils of the sea, piracy, general average and salvage. General average is the loss of goods occasioned by throwing overboard a part of the cargo in order to save the vessel during a storm Salvage is a compensation seamen obtain for saving property they find abandoned at sea.

Ownership.—Since goods are often sold after being insured, the consent of the company should be secured to make the insurance valid. This may be obviated by making the policy "for the benefit of whom it may concern at the time of the loss." Then the policy remains in force no matter who owns the goods.

Valued Policy.—The place for the valuation of the property is sometimes left blank. In that case the value must be determined at the time of the loss. But often the value is inserted; then that value is controlling for both parties. It is then called a valued policy. If in the policy the goods are valued at \$500 and the loss is \$250, the company pays only \$250. If the loss had been \$500 the company would have paid the whole loss. A full insurance is when value of property and value of policy are equal.

Seaworthiness.—It is taken for granted that a vessel to be insured is *seaworthy*. The person insured, not the company, must take the risk. If the vessel proves to be not seaworthy the insurance is void, though both the insured and insurers were not aware of it.

Lost or Not Lost.—These words in a policy have reference to the insurance of property on sea when neither the owner nor the company know whether it is already lost or not. The company take the risk, also, and will pay the loss at the time the contract is made.

Abandonment.—If property is wholly lost the company pays the whole amount of its policy. If the partial loss be less than half the value of the property the company pays its due proportion of the loss. But if the loss is partial, but amounts to more than half the property in value, its owner has the right to give up to the company what remains, and claim the full amount of the policy. This is called the right of abandonment. If the words "without right of abandonment" are in the policy the company can refuse to take the property.

LIFE INSURANCE

Life Insurance is a contract to pay a certain sum of money on the death of a certain person or when he reaches a certain age.

A Whole-life Policy is an agreement to pay a certain sum to the representatives of the insured mentioned therein on his death.

An Endowment Policy is an agreement to pay a certain sum to the insured at the end of a fixed term, or to his representatives on his death, should that happen before the end of the term.

Principles Governing.—Life insurance is governed by the same legal principles, so far as they are applicable, as other kinds of insurance. Any fraud or deceit in obtaining a policy, or misrepresentation of essential facts, will render it void.

Insurable Interest.—Any person can insure the life of another upon whom he or she is dependent for support, or in the continuance of whose life he or she has an adequate pecuniary interest, and a wife is always held to have an insurable interest in the life of her husband.

The consent of the person whose life is insured must be obtained to a policy issued in favor of a third party.

If there is no insurable interest the contract is void, as being a wager policy.

Restrictions are usually imposed by the company, such as to travel only within certain limits, or not to engage in hazardous employments. In such cases, if the insured desires to overstep the restrictions, permission must be obtained from the company.

Assigning Policy.—Life insurance policies are assignable. The policy itself usually specifies the way in which the transfer must be made.

Life Insurance Policy

No. 48,728.

The Occident Life Insurance Company,

\$1,000.

In consideration of the representations made to them in the application for this policy, and of the sum of thirty-four dollars and the further sums of thirty-four dollars to be paid on the 27th day of January and July of each year during the continuance of this policy, do insure the life of Chas. N. Milton, of Fort Leavenworth, in the County of Leavenworth, State of Kansas, in the amount of one thousand dollars for the term of his natural life. And

the said company does promise and agree to pay the amount of the said insurance at its office in St. Louis to Chas. N. Milton's legal representatives in sixty days after due notice and satisfactory proof of his death during the continuance of this policy.

In witness whereof the said Occident Life Insurance Company has by its president and actuary signed and delivered this contract this 27th day of July, 1904.

WARREN WRIGHT, Actuary, JAMES E. COSTELLO, President.

[SEAL]
Premium \$34, payable semi-annually.

Indorsed Assignment

I, the undersigned Chas. N. Milton, insured by the within policy issued by the Occident Life Insurance Company, in consideration of one dollar to me in hand paid by Clarence Dorr, and for other good and sufficient consideration, do hereby assign and transfer to the said Clarence Dorr, the said within policy, together with all the right, title, interest, and claim which I now have or-hereafter may have, in, to, or under the same.

Witness my hand and seal this first day of October, A. D. 1904.

CHAS. N. MILTON. [SEAL]

Executed in the presence of Edward Everett.

ACCIDENT AND CASUALTY INSURANCE

Accident and Casualty insurance provides indemnity, not only against loss or injury from personal accident, but also against loss from various fortuitous happenings.

Accident Insurance, as applied to the death or injury of persons, usually provides for a stipulated sum to be paid on the death by accident of the insured and a specific indemnity for the loss of one or both eyes, one or both hands, or one or both feet, while by the addition of about one-fifth to the ordinary premium rate double indemnity is promised for death or disabling injury while riding upon railways and other public conveyances. Some companies stipulate to pay, besides the usual indemnity in case of accidental death, a weekly benefit for a partially disabling accident.

Casualty Insurance covers losses by fortuitous happenings in many kinds of business. There are companies which insure against elevator accidents, breakage of plate glass, loss through dishonest employees, liability of employers for accidents to those in their employ, accidents to steam boilers, etc.

LANDLORD AND TENANT

LEASES

Leases are contracts by which one party, called the *lessor* or landlord, gives to a second party, called the *lessee* or tenant, possession of land or other real estate for a fixed period of time, receiving in return for the use, possession and profit thereof a fixed compensation called the *rent*.

Duration.—A lease may be for life, by sufferance, or for a term of years.

A Lease for Life terminates with the death of the lessee or tenant or any person specified as such in the lease.

A Lease by Sufferance of the landlord exists when a lease for a term of years has expired and the tenant is allowed to remain in possession. Such possession may be terminated without notice.

A Lease at Will is one which exists only during the will of the landlord and may terminate at the will of either party, as the rights of possession on the part of the landlord or the rights of abandonment on the part of the tenant may justify, or by the death of either party.

A Lease for a Term of Years begins and ends at a certain specified date. Under the latter the tenant possesses greater privileges than under either of the former. When the number of years is not mentioned it is construed to mean not less than two.

Written or Unwritten.—Leases for a term of more than one year, in most of the States, must be in writing, and in some States must be executed, acknowledged and recorded in the same manner as deeds, otherwise they are invalid as against third parties without notice.

Essential Specifications in a written lease are: dates, names, rent, description.

The Date fixes the beginning of the lease. Where no date is mentioned the time commences ordinarily with the delivery of the lease. This, however, is not always conclusive if another date can be proven.

Names.—The law recognizes only one Christian name and the surname. If a party assumes a false name he is nevertheless responsible. The landlord deals with the *man*, not with the name.

The Rent.—Rents may be payable in other valuables besides money; the amount should, however, always be stated. If not

stated, the law will allow the landlord what the use of the premises is reasonably worth.

Description of Premises.—The lease must describe the premises. It need not be in full detail; any general description that will identify the property is sufficient. The parts and appurtenances that ordinarily belong to such premises are included.

Who Cannot Give a Lease.—A husband cannot make a lease which will bind his wife's property after his death. A guardian cannot give a lease extending beyond a minor's majority which the minor cannot annul if he wishes, but if he does not annul it the tenant is bound by it. Under the common law a married woman cannot lease her property, but under the statutes of most States she can. A special statute supersedes the common law.

A minor cannot make a valid lease, but can become a tenant. Students under age hiring rooms come under this class.

Rights of Landlord

Subletting and Assigning Lease.—The landlord can prohibit his tenant from subletting the premises, or any part of them, or from assigning the lease, by stating the prohibition in a special clause of the same.

Tenant Breaking the Condition.—If the tenant has broken the condition of the lease by subletting the premises, the landlord, if he accepts the rent due, cannot remove the tenant.

Right to Inspect Premises.—The landlord has the right to enter upon the premises to ascertain whether there is any waste or injury done, after first giving notice of his intention.

Making Repairs.—Unless expressly covenanted, the landlord is not obliged to make the necessary repairs. If a tenant wishes his landlord to make special repairs during the term he must stipulate for the same in the lease. But if the landlord does agree to make all necessary repairs and fails to do so, even that does not relieve the tenant from paying rent.

Notice to Quit.—In case of a tenant at will, or one who holds over after the expiration of his lease with the consent of the landlord, a notice to quit is necessary to compel him to give up his possession. This notice must, as a general rule, be given at a date before some "rent day," and distant from it by the usual period at which rent is payable. Thus, if it is payable monthly, there should be a month's notice ending on the day when the rent is payable. If the rent is in arrears, only a brief notice is

required. In most of the States this is fixed at from five to fourteen days. Such notice need not be made to end upon the day when rent is payable.

Refusal to Vacate.—If a tenant refuses to vacate the premises after the termination of his lease, from any cause, the proper and safest way for the landlord, as well as the cheapest, is to get him out by process of law, or by a sealed lease to a third party, who can legally claim possession.

Rights of Tenant

Some of the rights of tenants are embodied in the above statements of the rights of the landlord.

To What a Tenant is Entitled.—In taking possession of the premises the tenant is entitled to all the privileges and appurtenances to the property in all their details without being expressed in the lease.

Sale of Property.—The landlord has no right to interfere with the tenant's rights by selling the property. Such sale must be made subject to the rights of the tenant.

The Right to Sublet.—A tenant can sublet the rented premises or any part of them, unless expressly prohibited from doing so by the terms of the lease. He, however, remains responsible to his landlord, unless the latter accepts such third party as his tenant in place of the former and releases him in writing.

Lease Assignable.—A tenant's lease is always assignable unless it contains restrictions to the contrary. Such an assignment, however, to be fully legal must be under seal. The assignment may be for a part or the whole of the original term, but if for less than the original term, then it is properly subletting.

The Subtenant.—The subtenant bears no relation to the original landlord and is not responsible to him for rent. The tenant from whom he has rented is his only landlord. In the case of an assignment of the lease the new tenant becomes the tenant of the original landlord and must pay him the rent.

Repairs.—A tenant cannot make repairs upon the property rented and deduct the amount paid out from the rent, for that would be in effect compelling the landlord to do it.

Making Improvements.—For improvements that become part of the premises, or such as cannot be removed without injury to the same, the tenant can claim no allowance from the landlord; but a tenant may remove from rented property articles which he has placed for use in some trade, such as steam engines or

other machines, or even buildings erected for the same purpose, or articles for domestic use, such as furnaces, shelves, gas fixtures, etc. Of course his personal property a tenant can remove any time at pleasure.

Right to Quit.—Where the renting is for a definite time no notice from either party to the other is necessary, as the landlord has the immediate right of possession as soon as the time expires; so the tenant has also the right to vacate at that time without giving notice to the landlord. Where, however, no limit of time is set a notice from either party is required of six months' time or less.

Payment of Taxes.—Where the tenant is to pay the taxes on the property he occupies it must be distinctly stated in the lease, as a verbal promise is of no effect.

A Recorded Lease.—If a lease for three or more years is acknowledged and recorded in the recorder's office, then the leased property cannot be secretly or fraudulently conveyed during that time.

Effects of Mortgage.—If after renting the landlord should mortgage the property, the mortgagee's rights would be subject to those of the tenant, and a sale or foreclosure could not disturb the tenant's possession.

Duties of the Landlord

- 1. It is the landlord's duty to see to it that his tenant has the quiet enjoyment of the premises and is not disturbed by any one having a better title to the same than the landlord.
- 2. The landlord must not render the tenant's occupation uncomfortable by erecting anything like a nuisance on or near the premises.
- 3. If not otherwise provided for in the lease, it is the landlord's duty to pay the taxes, ground rent, or interest on a mortgage that may exist.
- 4. The landlord is not bound to make repairs or allow the tenant for repairs which he may make unless especially agreed for in advance and so stated in the lease.

Duties of the Tenant

- 1. The tenant must take such care of the premises that others may not be injured by any neglect of any part of it.
- 2. The chief duty of the tenant is to pay rent. If no time for his possession is fixed, then he is only obliged to pay for the time

he has occupied; but if under any agreement for a certain term he will have to pay for that term.

- 3. He is expected to keep the premises wind and water tight and repair all damages made or suffered by him. Natural wear and tear he need not make good.
- 4. The tenant is obliged to return the premises to his landlord at the end of his term undiminished in value by any willful or negligent act of his. This requires him to replace broken doors or windows, or such other articles as may have been broken by use, neglect or accident.

Lease for Renting a House-Short Form

This instrument, made the first day of April, 1904, witnesseth, that I have this day let and rented unto Charles Waters my house and premises, No. 430 Lincoln Ave., in the City of Aurora and State of Illinois, with the sole and uninterrupted use and occupation thereof for one year, to commence the first day of May next, at the monthly rental of twenty-five dollars, payable in advance.

Witness my hand and seal.

JACOB BINDER. [SEAL]

Lease for Renting a House-Long Form

This Indenture, made the 20th day of May, 1904, between William B. Clark, of Chicago, State of Illinois, of the first part, and James L. Holmes, of the same place, of the second part.

Witnesseth, That the party of the first part has hereby let and rented to the party of the second part, and the party of the second part has hereby hired and taken from the party of the first part, the ground floor, cellar, and second story of the premises known as 4244 Indiana Ave., in the City of Chicago, with the appurtenances, for the term of three years, to commence the first day of June, 1904, at the yearly rental of nine hundred dollars (\$900), payable in equal quarterly payments on the usual quarter days in each year.

And it is agreed that if any rent shall be due and unpaid, or if default shall be made in any of the covenants herein named, then it shall be lawful for the said party of the first part to re-enter the said premises and to remove all persons therefrom.

And the said party of the second part covenants to pay to the said party of the first part the said rent as herein specified and that at the expiration of the said term the said party of the second part will quit and surrender the premises in as good state and condition as reasonable use and wear thereof will permit, damages by the elements excepted; and the said party of the first part covenants that the said party of the second part on paying the said yearly rent and performing the covenants aforesaid shall and may peaceably and quietly have, hold, and enjoy the said demised premises for the term aforesaid.

In witness whereof the parties hereto have hereunto interchangeably set their hands.

WILLIAM B. CLARK, JAMES L. HOLMES.

Landlord's Agreement

This certifies that I have let and rented, this first day of Soptember, 1904, unto Chas. Burrows my house and lot, No. 450 Taylor Street, in the City of St. Louis State of Missouri, and its appurtenances; he to have the free and uninterrupted occupation thereof for one year from this date at the yearly rental of five hundred dollars, to be paid monthly in advance, rent to cease if destroyed by fire or otherwise made untenantable.

HENRY BRANDON.

Tenant's Agreement

This certifies that I have hired and taken from Henry Brandon his house and lot, No. 450 Taylor St., in the City of St. Louis, State of Missouri, with appurtenances thereto belonging for one year, to commence this day, at a yearly rental of five hundred dollars, to be paid monthly in advance unless said house becomes untenantable from fire or other causes, in which case rent ceases, and I further agree to give and yield said premises one year from this first day of September, 1904, in as good condition as now, ordinary wear and damage by the elements excepted.

Given under my hand this day, etc.

CHAS. BURROWS.

Landlord's Notice to Quit

To CHAS. BURROWS.

Sir: Please observe that the term of one year for which the house and land situated at No. 450 Taylor St., and now occupied by yourself, were rented to you expired on the first day of September, 1905, and as I desire to repossess said premises you are hereby requested and required to vacate the same.

Respectfully yours,
HENRY BRANDON.

St. Louis, Mo., Sept. 10, 1905.

Tenant's Notice of Leaving

TO HENRY BRANDON.

Sir: The premises I now occupy as your tenant at No. 450 Taylor St. I shall vacate on the first day of July, 1905. You will please take notice accordingly.

Yours truly,

CHAS. BURROWS.

St Louis, Mo., June 10, 1905.

FARM LEASES

While the foregoing laws are of general application to landlords and tenants, some additional features pertaining to farm leases demand special attention.

General Duties of Farm Tenants.—A tenant of a farm is bound without a special clause in the lease to cultivate the land, and generally so to manage all the affairs of the farm as good husbandry requires, and as is the custom in the vicinity.

Crops.—As a general rule when no time is specified at which the tenancy shall cease, the tenant is entitled to the so-called "away-going crops," or crops of the present season, but when the time is fixed and certain the tenant is not entitled to such crops, because he knew when he sowed that he took the risk of getting his crops off before the termination of his term. It is also held that the tenant leaving is entitled only to the annual productions of the soil raised by his own labor, which does not include the permanent and natural products of the earth, such as trees, fruits of the orchard, natural grasses and the like. Local usages of the country are, however, largely taken into consideration here, and special statutes of the States may vary greatly in this respect.

Manure.—It is a general law that manure upon a leased farm cannot be removed by the outgoing tenant.

Fixtures.—The question as to what constitute fixtures on a farm is a broad one, and we can only say that respecting this the rules are liberal in favor of the tenant. It is stated in a general way that a tenant may sever and remove at any time all such fixtures of a chattel nature as he has himself erected or placed upon the rented premises for the purpose of ornament, domestic convenience, or to carry on a certain trade; such may be steam engines or other stationary machinery and buildings erected by him; for such machinery.

Taxes.—The tenant in possession is generally considered as liable for the taxes, but without special agreement he is under no [obligations to his landlord to pay the taxes, and if he does pay them so as to protect himself in the possession and free enjoyment of the premises he can deduct the amount from the rent and hold his landlord for any excess above the rent due him.

Good Advice.—No class of litigation is more intricate and technical than that of landlord and tenant. It should there-

fcre be avoided if possible. In order to do so have your lease carefully executed, specifying as far as possible all details of conditions, and then observe them carefully. If, however, any one, be he landlord or tenant, anticipates difficulty, then we advise him to secure the services of a competent lawyer to help him if possible to avert the litigation or to conduct it for him.

"Law and justice are two things which God has joined but man has put asunder."

Lease of a Farm

This Indenture, made this first day of March, 1904, between Chas. Ortland, of the township of Lisle, County of Dupage, and State of Illinois, of the first part, and John Burgess, of the said township and county, of the second part,

Witnesseth, That the said Chas. Ortland, for and in consideration of the vearly rents and covenants hereinafter mentioned and reserved on the part and behalf of the said Chas. Ortland, his heirs, executors, and administrators to be paid, kept, and performed, hath demised, set, and to farm let, and by these presents doth demise, set, and to farm let unto the said John Burgess, his heirs and assigns, all that certain piece, parcel, or tract of land situated, lying, and being in the township of Lisle aforesaid, known as lot No. [description of farm here], now in the possession of John Hartman, containing three hundred acres, together with all buildings and improvements, to have and to hold the same unto the said John Burgess, his heirs, executors, and assigns, from the first day of May next, for and during the term of five years next ensuing, and fully to be complete and ended, yielding and paying for the same unto the said Chas. Ortland, his heirs and assigns, the yearly rent or sum of One Thousand Dollars on the first day of May in each and every year during the term aforesaid, and at the expiration of said term or sooner if determined upon, he the said John Burgess, his heirs or assigns, shall and will quietly and peacefully surrender and yield up said premises with the appurtenances unto the said Chas. Ortland, his heirs and assigns, in as good order and repair as the same are now, reasonable wear, tear, and casualties which may happen by fire or otherwise only excepted.

In witness whereof we have hereto set our hands and seals.

Chas. Ortland, [SEAL]
John Burgess. [SEAL]

Signed, sealed, and delivered in presence of WILLIAM KLINK.

A Lease of Real Estate

This Indenture, made this third day of January, A. D. 1904, between William Caxton of the Town of Centralia, in the County of Marion and State of Illinois, of the first part, and Chas. Riley of the Town of Salem, in the county and State aforesaid, of the second part. Witnesseth, that the said William Caxton, for the consideration hereinafter named, hath demised, granted, and leased and doth by these presents hereby demise, grant, and lease unto the said Chas. Riley and his assigns Lots five (5) and six (6) in Block eight (8) of the original Town of Centralia, as shown by the plat of said town. Also the southeast quarter (S. E. ‡) of Section six (6), in Township ten (10),

Range seven (7), west of fourth Principal Meridian, and containing eighty (80) acres, according to government survey, together with all the privileges and appurtenances belonging thereto, to have and to hold the above described premises for and during the time of three years from the date hereof.

And the said Chas. Riley doth covenant and agree to pay the said William Caxton or his assigns the sum of Nine Hundred Dollars as yearly rent for said premises, in three equal payments of Three Hundred Dollars each, at the expiration of every four months from date, during the continuance of this lease.

In witness whereof the said parties have to this and one other instrument of the same tenor and date interchangeably set their hands and seals the day and year first above written.

WILLIAM CAXTON, [SEAL] CHAS. RILEY. [SEAL]

Signed, sealed, and delivered in presence of

JOHN WEIDMANN.

LICENSE

License is a special permission granted by a competent authority to a person or persons to carry on a certain trade or business, or to do certain acts, at a certain place, within a certain district, city, town, or village, on the payment of a special tax or premium for such privileges.

The trades, vocations and professions for which licenses are granted are of great variety. They are regulated by statutes and ordinances of city governments, which provide restrictions and fix penalties for violating the conditions of the license by misrepresentation or other fraudulent practice.

A license is liable to be recalled or canceled by the authorities who have issued the same, either in accordance with a fixed date or because of some violation by the licensed person.

Canvassers and Drummers are held not to be liable to payment of a peddler's license where they simply take orders from samples of goods or prospectuses of books, etc. But where they have the goods ready for delivery they come within the definition of peddlers and must obtain a license.

Government License to sell liquor, etc., strictly speaking, is not a license, but simply a receipt for special tax. It does not authorize the sale of liquors, etc., in violation of State laws or municipal regulations.

A license may be legally granted in mere words without writing, but in such cases the presence of a competent witness is required to substantiate the same.

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The following forms may serve as general models and prove of service to some interested party.

License from the Government to Retail Liquors

\$20.00. Series of 1904. No. 307,850. United States stamp for special tax. Internal Revenue.

Received from William R. Howard the sum of Twenty Dollars for special tax on the business of retail liquor dealer, to be carried on at Cleveland, State of Ohio, for the periods represented by the coupon or coupons hereto attached.

: U. S. Rev. Seal.: Dated at Cleveland, Ohio, November 10, 1904.

Chas. R. Morten, Collector 1st Dist., State of Ohio.

Severe penalties are imposed for neglect or refusal to place and keep this stamp conspicuously in your establishment or place of business.

Form of Peddler's License

By authority of the City of Chicago, permission is hereby given to Wm. O'Brien to peddle green fruit, numbered 450, from the date hereof until the first day of April next in said city, subject to the ordinances of said city in such cases made and provided and to revocation by the Mayor at any time at his discretion.

Witness the hand of the Mayor of said city and city seal.: the corporate seal thereof, this fifteenth day of April,: 1904.

CARTER H. HARRISON, Mayor.

Attest: ————, City Clerk.

On the back of the license is printed the following: LICENSE 450.

To Peddlers: Your attention is directed to the following section from the ordinance relating to peddlers.

Section 5. Any person who shall exercise the vocation of peddler by means of a wagon, cart, or other vehicle shall cause his name, together with the number of his license, to be painted on the outside of his vehicle, the letters and figures not less than one inch in length.

Any violation of this section shall subject the offender to a fine of not less than Five Dollars and not more than Fifty Dollars.

LIENS

A Lien is a hold upon or right to property to secure the payment of a debt or the discharge of an obligation; more specifically, it is a right in one person to retain that which is in his possession belonging to another, till certain demands of the person in possession are satisfied.

A Lien by Force of Common Law consists in a mere right to retain possession of the property until the debt or charge is paid.

A Particular Lien holds the property of another because of labor bestowed upon it or money expended for it.

A General Lien includes a particular lien and consists in a right to retain the property of another because of a general balance due from the owner.

Parties Having a Particular Lien without Special Statute.— Every Mechanic has a particular lien on any article on which he has expended labor and money.

Carriers also have a lien on all goods consigned them for special services rendered.

Lawyers have a lien on all the papers in a case for their pay. Pawnbrokers have a right of lien in case where the person pawning the goods has authority to pledge, but not otherwise.

All Venders have a lien on goods for their pay as long as they are not delivered, but not after that.

Commission Merchants and Brokers have a general lien on goods for commission due.

Hotel Keepers have a lien upon the baggage of their guests for accommodation charges.

Liens by Express Agreement.—This occurs when goods are placed into the hands of a person for some special purpose with an express contract that the goods shall be a pledge for the labor or expense incurred or where property is delivered to another with the express understanding that it is security for a loan made on the credit of it.

Other Important Liens are: the lien upon the land of a debtor created in favor of his creditor by the judgment or other process of a court; the equitable lien of a seller of real estate for the unpaid balance of the purchase price, which is recognized only in some of the States; and the statutory lien of mechanics on the houses and ships which they build or repair.

Special Statutes.—In many States liens are given by special statutes to boarding-house keepers, livery men and others.

Requisites of a Lien.—The essential requisite of a personal property lien consists in the lawful delivery of the property to the party claiming the lien or to his authorized agent. Whenever possession is voluntarily given up the lien is lost.

Rights of Creditor.—A creditor can by lien retain possession of goods even against the assignee of debtor, provided they have been placed honestly into his hands.

Enforcement of Liens.—A person holding a lien under the common law has in general not the power to sell the property;

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it is only a right to force payment by holding the property and thereby depriving the owner from the use of it until he renders justice where it is due. Where property is held as security for a loan the lender may sell, but he must give due notice of the time and manner of sale so as to give the owner of the property all possible chance to redeem or to waive rights. Many States have special statutes for the enforcement of liens and it is safest to consult these where enforcement becomes necessary.

MECHANICS' LIENS

Liens created by statutes, although based upon the principles of common law, are designed to go further, namely: to give liens even where the possession is not with the consent of the owner or where exclusive possession is impossible.

Mechanics' liens are exclusively created by statutes; and no matter how just the claim may seem the lien will not exist unless the party brings himself under the provisions of the statute.

The statute is based upon the principle that the party who has increased the value of the property by his labor or material furnished should have security upon the property although changed in form.

Mechanics are here assured of their right to a lien upon the property for their labor and material furnished, but as to details concerning the conditions of the lien and the manner of enforcing it they will do well to consult the statutes of their particular State.

Before bringing action to enforce such a lien, notice must be given in writing by the holder of the lien to the owner of the property, and in order to guard against fraud to third parties, the certificate of the claim must be filed with the county clerk or other officer as provided by the statute. The following form may be used:

Notice of Mechanic's Lien

CLERK OF THE COOK COUNTY COURT.

Chicago, Ill.

SIR: Please take notice, that I, Frank Greene, residing at 4550 Wentworth Ave., in the City of Chicago, County of Cook, have a claim against Charles Hudson, owner (or only contractor, as the case may be) of a new four-story brick dwelling house, amounting to Fifteen Hundred and Forty Dollars and Fifty Cents, now due to me, and that the claim is made for and on account of material furnished and labor done, and that such work was

done and materials furnished in pursuance of a contract entered into the 15th day of April, 1904, (here describe the contract,) between the undersigned and the said Chas. Hudson. The said building is situated on Lot ——, in Block ——, in Stone's addition to the City of Chicago, on the east side of Halsted Street, and is known as No. 3242 of said street. The following is a diagram of said premises.

(Insert diagram.)

And that I have and claim a lien upon said building and the appurtenances and lot on which said building stands, subject to the provisions of an Act of the Legislature of the State of Illinois entitled "An Act to Secure the Payment of Mechanics, Laborers, and Persons Furnishing Material Toward the Erection, Altering, or Repairing of Buildings in the City of Chicago," passed —————, 19———, and of the acts amending the same.

Dated this 15th day of October, 1904.

FRANK GREENE.

Frank Greene, being duly sworn, says that he is the claimant mentioned in the foregoing notice of lien; that he has read the said notice and knows the contents; and that the same is true to his own knowledge, except as to those matters stated on information and belief, as to those matters he believes to be true.

FRANK GREENE.

Sworn before me this 15th day of October, A. D. 1904.

George Ferguson,
Police Justice.

MAIL ORDER BUSINESS

Origin.—The mail order business is an evolution of the department store, or the concentration under one management of the sale of every imaginable article for which a customer can be found. It is simply the department store universalized by means of the postoffice establishment.

The Postal Service of the United States is the greatest business concern in the world. It is estimated that it handles eight thousand pieces of mail matter a minute, and in the course of a year from four to five billion pieces, including letters, papers, books and parcels.

It was a master stroke to convert this great institution into a business agent for a commercial house, and a fortune was realized from it almost immediately. Men and women are still making fortunes through the operation of this great postal department store system.

The mail order mercantile business originated in Chicago, where it is now carried on the most extensively. In 1903 the mail order houses of that city did a total business of \$55,000,000.

How to Engage in the Business.—One who has made a success

of it furnishes the following rules for the guidance of others who may wish to engage in the business:

First.—Go slowly. Don't decide to embark upon a mail order career and then resign your present position without knowing definitely in what direction you are going to work. A few months of quiet consideration and planning won't do any harm. There will be as many customers for you after that period as there are now.

Second.—Choose carefully a "leader" or article upon which you will base your main campaign and upon which you can get all the profit. To do this, unless you are already the possessor of an exclusive idea, run carefully over the entire list of what people wear, eat, drink, or need from the cradle to the grave. Nothing is too small or too large to be included in this vast catalogue, and your eventual choice will probably come in a flash of inspiration.

Third.—Having chosen your leader, investigate carefully the price at which you will be able to offer it to successfully compete with other similar articles. Be sure that you can sell it through the mails cheaply enough to meet competition.

Fourth.—Plan your advertising. Consultation with an expert is a safe precaution, as an advertising man possesses experience that will be valuable to you even if you are brilliant enough to successfully word your own advertisement.

Fifth.—As a general rule one-fifth of a small capital is not too much to expend in experimenting. When you begin to get results resign your position, devote your whole time to your new business, and develop it economically and judiciously upon the lines originally decided upon.

Sixth.—Do not be content with a single leader. Get from supply houses a number of specialties, and inclose circulars for them in all your letters. Any orders thus gained cost merely the two-cent stamp that carries the bait.

These are simple rules to write, but it takes business capacity to carry them out. The days of the "fake" mail business are over. Every now and then a swindle is brought to light, but the government is stern and relentless in ferreting out and suppressing such enterprises. It was the government that gave the mail order business its first great impetus by reducing the rate of postage, and it is the government that has doubled the total trade in the last few years by establishing the rural free delivery system. (For rates of postage on merchandise, etc, see Postal Information.)

MERCANTILE AGENCIES

A Mercantile Agency is an establishment for supplying merchants, bankers, and all who do a more or less credit business, with information as to the financial standing of persons engaged in business.

How they Operate.—These agencies obtain from local correspondents in all parts of the country information as to the character and personal responsibility of individuals, firms, and corporations, and make such information readily available at all business centers.

Commercial Ratings.—From the information thus obtained is deduced what are known and recognized as "commercial ratings." The names of the various merchants, with the ratings, are issued quarterly, in book form, and are classified, first by states and provinces, then by cities and towns, all arranged in alphabetical order. These volumes, covering the United States and Canada, embrace a million and a quarter of distinctive business organizations, and yet so simply are they classified that a reference can be had with as much readiness as the finding of a subject in a cyclopedia.

Leading Agencies.—The Bradstreet and R. G. Dun & Co. concerns are the leading agencies for the United States and Canada. They have headquarters in New York, and sub-agencies in all principal cities. Agencies also exist in Europe, and importing and exporting houses on opposite sides of the globe are thus kept informed as to each other's commercial standing.

Benefit to Merchants.—This system enables the solvent merchant to purchase goods anywhere with reasonable certainty that they will be delivered promptly, avoiding undue delay consequent to investigating his credit. The agency thus serves as a sort of clearing-house for credit, and good ratings are much sought after in the business world.

Credit Books are also issued, furnishing the same sort of information to those selling to particular trades.



MORTGAGES

A Mortgage is a conveyance of property, either real or personal, given to secure payment of a debt, or the performance of some special act. When the debt is paid the mortgage becomes void and of no value.

Names of Parties.—The person mortgaging his property is called the *mortgagor*, and the person to whom the mortgage is given the *mortgagee*.

REAL ESTATE MORTGAGES

In real estate mortgages, unless otherwise provided, the person giving the mortgage retains possession of the property, receives all the rents and other profits and pays all taxes and other expenses.

Must be in Writing.—All real estate mortgages must be in writing, signed and sealed. The time when the debt, to secure which the mortgage was given, is due must be plainly stated, and the property conveyed must be clearly described and located.

Must be Acknowledged.—A mortgage pledging real estate must be acknowledged like a deed, before a proper public officer, whose duty it is to record such instruments.

The Accompanying Bond or Note.—It is usual not only to insert a covenant of promise in the mortgage to pay the debt, but for the mortgagor to give also his bond or note, as collateral to the personal security. In this case the mortgagee may sue and recover upon the note or bond, or he can foreclose his mortgage; and if there is not sufficient realized from the sale to pay the debt he may recover the balance on the bond or note.

The bond or note is drawn precisely like any other instrument of the kind. In the case of notes, it is customary to state therein that they are secured by a mortgage of even date.

Ownership.—Formerly the mortgagee was considered the legal owner of the property, but now he is regarded as having only a lien upon the property by way of security. The title still remains in the mortgagor.

Redemption.—By what is termed equity of redemption the mortgagor is given further time to redeem his property after the debt for which the mortgage is security falls due. Within this extended time he must pay the full amount of the mortgage with the interest prescribed by the statute.

The Equity of Redemption is such a positive right that it may be sold, and is of such a character that the law refuses to allow it to be foregone, even by an agreement to that effect in the mortgage.

Power of Sale.—A power of sale is not essential to a mortgage, but it may contain a clause permitting the sale of the property, if forfeited by nonpayment of debt, as required. A mortgage may be so drawn that the property can be sold without decree



THE MAN WHO NEVER PAYS HIS MORTGAGE

from the Court, according to the statutes of the State, or by agreement of the parties.

Mortgages are sometimes so drawn that a single failure in paying the interest at a stated time renders due the whole, both principal and interest, and gives the mortgagee authority to sell the property long before the debt is due.

Assignment.—A mortgage can be assigned, but unless the bond or note is also assigned it is worthless and gives no right to foreclose.

Making Payments.—If the wording in the mortgage or note is, "payable on or before" a certain date, the creditor cannot compel payment before that date (if the interest is kept up); but the debtor if so disposed can pay at any time and the creditor must accept it.

A debtor cannot compel his creditor to accept payment before it is due, because he has a right to have his money remain on interest according to agreement.

Whenever payment is made upon a note or bond or mortgage it should be carefully indorsed upon the instrument.

Tendering Payment.—If the full amount due on a mortgage is tendered to the creditor it stops the interest and releases the lien on the mortgage, but the debt remains. The creditor has after that only the individual responsibility of the debtor to secure his claim. This rule is applicable to mortgages on real



THE THRIFTY FARMER WHO PAID HIS MORTGAGE AT MATURITY

and personal property, as also to all liens for personal labor and chattels.

Foreclosure.—If the mortgagor fails to meet the conditions of the mortgage then the mortgagee may foreclose. The method of foreclosure differs in the several states. In some the statutes prescribe a short, summary method; in others an action of court is necessary; in still others either method is legal.

HOW TO FORECLOSE A MORTGAGE

The methods of foreclosing vary in different States, but the following general steps are common in all:

- 1. Application to a Court of Chancery for authority to fore-close.
 - 2. Hearing the parties by the Court.

3. Referring the case to a Master in Chancery.

4. Advertising the property.

5. Selling it to the highest bidder at auction.

6. Deeding it to the purchaser.

7. Paying over any surplus fund remaining from the sale to the mortgagor.

Since the interests involved in giving and taking a mortgage on real estate are of such great importance that a mistake in executing it or in complying with its conditions may subject the interested parties to much trouble and heavy losses, the mortgage, bond and note should be drawn up with the utmost care and the conditions laid down strictly and promptly complied with.

Promissory Note Secured by Mortgage

\$3,000.

New York, March 15, 1904.

One year after date I promise to pay to Robert Hartless Three Thousand Dollars at the First National Bank of New York City, with interest at the rate of seven per cent per annum, making such sale, on demand, to the party for value received.

This note is secured by a mortgage of even date herewith on certain real estate (describe the premises).

Signed.

Julius Hawthorne.

Real Estate Mortgage to Secure Payment of Above Note

This Indenture, made this 15th day of March, in the year one thousand nine hundred and four, between Julius Hawthorne, of the City. County, and State of New York, and Margaret, his wife, parties of the first part, and Robert Hartless, of the City of Chicago, County of Cook, and State of Illinois, party of the second part,

Witnesseth, That the said party of the first part, for and in consideration of the sum of Three Thousand Dollars, does grant, bargain, sell, and convey unto the said party of the second part and to his heirs and assigns all, (give a complete description of the premises mortgaged), together with all the hereditaments and appurtenances thereto belonging or in anywise appertaining.

This conveyance is intended as a mortgage to secure the payment of the above note according to the condition of the same, and these presents shall be void if such payment be made.

But in case default shall be made in the payment of the principal or interest as above provided, then the party of the second part, his executors, administrators, and assigns, are hereby empowered to sell the premises above described, with all and every of the appurtenances or any part thereof, in the manner prescribed by law, and out of the money arising from such sale to retain the said principal and interest, together with the costs and charges of making such sale, and the surplus if any there be shall be paid by the party making such sale, on demand, to the party of the first part, his heirs or assigns, etc.

In witness whereof said party of the first part hereunto set their hands and seals the day and year first above written.

Julius Hawthorne, [SEAL] Margaret Hawthorne. [SEAL]

Signed, sealed, and delivered in presence of
Walter May,
Harvey Jones.

Mortgage—Short Form

The Mortgagor, George E. Arnold and Charlotte Arnold, his wife, of the town of Wooster, in the County of Wayne and State of Ohio, Mortgage and Warrant to John Randolph, of the same place, to secure the payment of a certain promissory note for the sum of One Thousand Dollars, payable to the order of the said John Randolph in two years from the date thereof, with interest at the rate of six per cent per annum, payable semi-annually, the following described Real Estate: Lots number one (1), two (2), and three (3) in Block No. fifteen (15) of Carter's Addition to the Town of Wooster, in the County of Wayne and State of Ohio, hereby releasing and waiving all rights under and by virtue of the Homestead Exemption Laws of this State.

Dated this 4th day of May, A. D. 1904.

GEORGE E. ARNOLD, [SEAL] CHARLOTTE ARNOLD. [SEAL]

Signed, sealed, and delivered in presence of ARTHUR B. LOWE. HARRY N. STEVENS.

Release and Satisfaction of Mortgage

Know all Men by These Presents, That the debt secured by mortgage upon the following described—property, situated in —, in — County, in the State of —, to-wit: (describing it), wherein Chas. Anderson is grantor and Fred Johnson is grantee, and dated —, a — of which is — in volume —, page —, in the office of the (register or recorder) of deeds of — County, —, has been fully satisfied, in consideration of which said mortgage is hereby released.

FRED JOHNSON.

Witness: -----

CHATTEL MORTGAGES

A Chattel Mortgage is a mortgage on personal property. Persons sometimes desire to use their personal property as security and yet retain possession of it, as, for instance, furniture, machinery, tools, a library, etc. This can be done by giving a chattel mortgage, which is really a conditional sale of the property, to the creditor, whose the property becomes if the debt is not paid when due.

Rules Governing Chattel Mortgages

- 1. A chattel mortgage must, in some of the States, be acknowledged before a justice of the peace or before the county judge.
- 2. It runs out in two years or such other time as prescribed by the State statute.
- 3. No seal is necessary, though commonly used, in a chattel mortgage.
- 4. A person cannot mortgage property which he does not own. Hence a chattel mortgage made by a merchant upon all goods which he may hereafter purchase is of no effect.
- 5. If the mortgagor retains possession, the instrument is of no avail as against third parties unless *recorded* in accordance with the law of the State where it is made.
- 6. The property must be taken possession of by the mortgagor when the mortgage matures, or other creditors can claim the property.
- 7. If the debt is not paid when due the property becomes the creditor's and the debtor is entitled to no surplus.
- 8. It is a criminal offense for the mortgagor to sell the property covered by a chattel mortgago.
- 9. Mortgages of personal property should have a clause providing for the equity of redemption.
- 10. A mortgage may sell or transfer his mortgage to another, but the purchaser cannot sell the property until the mortgage matures.

Chattel Mortgage, with Power of Sale

Know all Men by These Presents, That I, John F. Thomas, of the City of Wilmington, State of Delaware, in consideration of five hundred dollars to me paid by Henry A. Da is, of the city and State aforesaid, the receipt of which is hereby acknowledged, do hereby grant, bargain, and sell unto the said Henry A. Davis, and his assigns, forever, the following goods and chattels, to wit:

[Here insert an accurate list of the articles mortgaged, giving a full description of each.]

To Have and To Hold, All and singular the said goods and chattels unto the mortgagee herein, and his assigns, to their sole use and behoof forever. And the mortgagor herein, for himself and for his heirs, executors, and administrators, does hereby covenant to and with the said mortgagee and his assigns, the said mortgagor is lawfully possessed of the said goods and chattels, as of his own property; that the same are free from all incumbrances, and that he will warrant and defend the same to him, the said mortgagee and his assigns, against the lawful claims and demands of all persons.

Provided, Nevertheless, That if the said mortgagor shall pay to the

mortgagee, on the tenth day of May, in the year 1905, the sum of five hundred dollars, then this mortgage is to be void, otherwise to remain in full force and effect.

And Provided Further, That until default be made by the said mortgagor in the performance of the condition aforesaid, it shall and may be lawful for him to retain the possession of the said goods and chattels, and to use and enjoy the same; but if the same or any part thereof shall be attached or claimed by any other person or persons at any time before payment, or the said mortgagor, or any person or persons whatever, upon any pretense, shall attempt to carry off, conceal, make way with, sell, or in any manner dispose of the same or any part thereof, without the authority and permission of the said mortgagee or his executors, administrators, or assigns, in writing expressed, then it shall and may be lawful for the said mortgagee, with or without assistance, or his agent or attorney, or his executors, administrators, or assigns to take possession of said goods and chattels, by entering upon any premises wherever the same may be, whether in this county or State, or elsewhere, to and for the use of said mortgagee or his assigns. And if the moneys hereby secured or the matters to be done or performed, as above specified, are not duly paid, done, or performed at the time and according to the conditions above set forth, then the said mortgagee, or his attorney or agent, or his executors, administrators, or assigns, may by virtue hereof, and without any suit or process, immediately enter and take possession of said goods and chattels, and sell and dispose of the same at public or private sale. and after satisfying the amount due, and all expenses, the surplus, if any remain, shall be paid over to said mortgagor or his assigns. The exhibition of this mortgage shall be sufficient proof that any person claiming to act for the mortgagee is duly made, constituted, and appointed agent and attorney to do whatever is above authorized.

In Witness Whereof, The said mortgagor has hereunto set his hand and seal this tenth day of May, in the year of our Lord one thousand nine hundred and four.

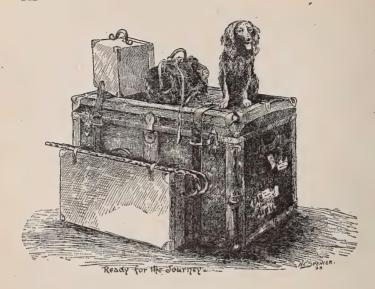
JOHN F. THOMAS. [SEAL]

Sealed and delivered in presence of WILLIAM WISE,
HARRISON WOOL.
STATE OF DELAWARE,
Sussex County.

This mortgage was acknowledged before me by J. F. Thomas, this tenth day of May, A. D. 1904.

Andrew White, Justice of the Peace.





NATURALIZATION

All foreigners not born within the jurisdiction of the United States are regarded as aliens until they are naturalized.

An alien has not the right to vote at elections of officers of the government, State, county, city or town; neither can he hold a public office nor serve on a jury before having declared his intention of becoming a citizen.

Rights of Aliens.—An alien is entitled to all the privileges of a citizen, except *political rights*. He can buy and sell real estate and personal property, make contracts and sue and be sued; he is entitled to the full protection of the government in his person and his property.

HOW TO BECOME NATURALIZED

1. Declaration of Intention.—Two years before he can be admitted as a citizen an alien must declare his intention to become a citizen of the United States before a federal court, or some local court of record, or the clerk of either of such courts. This declaration entitles him to a vote in most of the States. He must take the following oath before the court:

I, Jacob M. Becker, do swear that I will support the constitution of the United States and that I do absolutely and entirely renounce and abjure forever all allegiance to any foreign Prince, Potentate, State or Sovereignty whatsoever, and particularly do absolutely and entirely renounce and abjure all allegiance and fidelity to the Kingdom of Prussia, whereof I was a subject.

JACOB M. BECKER.

Sworn and subscribed in open court this 20th day of December, A. D. 1904.

- 2. Naturalization Completed.—Two years after filing his declaration of intention, having been a resident of the United States for five years, he again appears in court, giving written proof that he has been long enough in the United States to become a citizen, and makes oath of his allegiance as a citizen, accompanied by the oath of a witness, giving proof of his residence and moral character.
- 3. If an alien has served in the army or navy of the United States and can show papers of an honorable discharge from service, he can be naturalized after having lived one year in any State or territory and giving proof before the court of such residence.
- 4. Minor Resident Aliens.—A person having arrived in the United States under the age of eighteen years and having continued such residence until the time of his application for citizenship may at the age of twenty-one years, having lived in the United States five years, inclusive of the three years of his minority, be admitted as a citizen without making the formal declaration.
- 5. Widow and Children of Declarant.—If an alien should die after he has legally filed his declaration and taken the necessary oath of affirmation, but before he is actually naturalized, then his widow and children are entitled to all the rights and privileges of citizens upon taking the required oaths or affirmation which would have been required of him.
- 6. Children of Naturalized Persons.—Children of naturalized persons, if under twenty-one years of age at the time of the naturalization of their parents and residing in the United States, are considered as citizens thereof; and the children of citizens of the United States, though born in a foreign country, are citizens of the United States.
- 7. Certificate of Naturalization.—A person who has been naturalized according to law is entitled to a certificate, which is issued under the hand of the clerk and seal of the court. Such

certificate may in certain circumstances be of much importance to a naturalized person and should be obtained and preserved.

Chinese Not Eligible.—The naturalization of Chinamen is expressly prohibited by Sec. 14, Chap. 126, Laws of 1882.

CITIZENSHIP AND SUFFRAGE

Naturalization, or citizenship, is governed by national law, which provides that no alien shall be naturalized until after five years' residence.

Suffrage, or the right to vote, is governed by the laws of the different States.

A Naturalized Citizen is not entitled to vote unless the law of the State where naturalized confers the privilege upon him, and in many States an alien may vote six months after landing, if he has declared his intention, under the laws of the United States, to become a citizen.

Inhabitants of Insular Possessions.—By the act of 1900 creating Hawaii a territory the inhabitants were declared to be citizens of the United States. The inhabitants of the Philippines and Porto Rico are entitled to full protection under the constitution, but not to the privileges of United States citizenship until Congress so decrees, by admitting the countries as States or organizing them as territories.

QUALIFICATIONS FOR VOTING

In all the States except Colorado, Idaho, Utah, and Wyoming, the right to vote at general elections is restricted to males of twenty-one years of age and upward.

Women are entitled to vote at all elections, the same as men, in Colorado, Idaho, Utah, and Wyoming, and at school elections in Connecticut Illinois, Iowa, Kansas, Kentucky, Massachusetts, Minnesota, Nebraska, New Jersey, New York, North Dakota, Ohio, Oregon, South Dakota, Vermont, Washington, and Wisconsin.

In New York women otherwise qualified, but for sex, vote at village elections and town meetings to raise money by tax or assessment if they own property in the village or town.

Persons Unable to Read cannot vote in Connecticut. In California a person unable to read the constitution in English and to write his name cannot vote. In Massachusetts in order to vote a person must be able to both read and write. In Missis-

In all the States persons convicted of felony, and in most of the States paupers, idiots and lunatics are excluded from suffrage.

Naturalization Papers

DECLARATION OF INTENTION

I, A. B., do declare, on oath, that it is bona fide my intention to become a citizen of the United States, and to renounce forever all allegiance and fidelity to all and any foreign prince, potentate, state, and sovereignty whatever; and particularly to Edward VII, King of the United Kingdom of Great Britain and Ireland.

A. B.

Sworn in open court, this) —— day of ——, 19—.

—— day of ——, 19—. \ I. L. T. clerk of the —— court of ——, do certify that the above is a true copy of the original declaration of intention of A. B. to become a citizen of the United States, remaining on record at my office.

In testimony whereof, I have hereunto subscribed my name and affixed [SEAL] the seal of the said court, the —— day of ——, one thousand nine hundred and ——.

Oath of Alien

UNITED STATES OF AMERICA

STATE OF NEW YORK, SS.

A. B., being duly sworn, doth depose and say, that he is a resident in the State of New York, and intends always to reside in the United States, and to become a citizen thereof as soon as he can be naturalized and that he has taken such incipient measures as the laws of the United States require, to enable him to obtain naturalization.

Sworn before me, the —— day of ——, 19—.

J. S., Clerk of the U. S. District Court.

Certificate of Citizenship

Be it remembered, that on the —— day of ——, in the year of our Lord one thousand nine hundred and ——, A. B., late of Limerick, Ireland. at present of the city of ——, in the State of ——, appeared in the —— court of —— (the said court being a court of record, having common-law jurisdiction and a clerk and seal), and applied to the said court to be admitted to become a citizen of the United States of America, pursuant to the directions of the act of Congress of the United States of America, entitled, "An act to establish an uniform rule of naturalization, and to repeal the acts heretofore passed on that subject;" and also to an act entitled 'An act in addition to an act, entitled 'An act to establish an uniform rule of naturalization, and to repeal the acts heretofore passed on that subject;" and also to the "Act relative to evidence in cases of naturalization," passed 22d March, 1816; and also to an act entitled "An act in further addition to an act to establish an uniform rule

of naturalization, and to repeal the acts heretofore passed on that subject," passed May 26, 1824. And the said A. B., having thereupon produced to the court such evidence, made such declaration and renunciation, and taken such oath, as are by the said acts required:

Thereupon it was ordered by the said court, that the said A. B. be admitted, and he was accordingly admitted by the said court to be a citizen of the United States of America.

In testimony whereof, the seal of the said court is hereunto affixed this
—— day of ——, in the year one thousand nine hundred and ——,
[SEAL] and in the —— year of our independence.

Per curiam.

L. T., Clerk.



OFFICIAL POSITIONS UNDER THE CIVIL SERVICE ACT

The Civil Service Act, as it is commonly called, or the "Act to Regulate and Improve the Civil Service of the United States," as it is officially designated, was passed in January, 1883. It provides for the appointment of three commissioners, a chief examiner, a secretary, and other employees, and makes it the duty of the commissioners to aid the President in preparing rules for carrying the new act into effect, to make regulations to govern all examinations held under the provisions of the act, and to make investigations and report upon all matters touching

the enforcement and effect of the rules and regulations. The address of the commissioner is Washington, D. C.

Number of Positions.—There are about 235,000 positions in the executive civil service, about half of which are subject to competitive examination.

Qualifications of Applicants.—Applicants for examination must be citizens of the United States, and of the proper age. No person using intoxicating liquors to excess may be appointed. No discrimination is made on account of sex, color, or political or religious opinions. The limitations of age vary with the different services, but do not apply to any person honorably discharged from the military or naval service of the United States by reason of disability resulting from wounds or sickness incurred in the line of duty.

How Application must be Made.—Persons seeking to be examined must file an application blank. The blank for the departmental service at Washington, railway mail service, the Indian school service, and the government printing service should be requested directly of the civil service commission at Washington. The blank for the customs, postal, or internal revenue service must be requested in writing of the civil service board of examiners at the office where service is sought. These papers should be returned to the officers from whom they emanated.

Examinations are open to all persons qualified in respect to age, citizenship, legal residence, character, and health. More than one thousand local boards of examiners, designated by the commission, conduct examinations, make certification of eligibles, and perform such other work as may be assigned to them, at postoffices, custom houses, mints, and other local government institutions.

Register of Eligibles.—The name of each person obtaining a grade of 70 on the basis of 100 is entered in the order of his rating on the register of eligibles, with the names of those entitled to military or naval preference under Section 1,754, R. S., ahead of all others.

Appointments.—In case of a vacancy not filled by promotion, reduction, transfer, or reinstatement, the highest three of the sex called for on the appropriate register are certified for appointment, the apportionment being considered in appointments at Washington. In the absence of eligibles, or when the work is of short duration, temporary appointments, without examination, are permitted. The number of women applying for

clerical places is greatly in excess of the calls of appointing officers. The positions to which the largest numbers of them are appointed are those of assistant microscopist in the branch offices of the Bureau of Animal Industry at the various stockyards throughout the country, and teachers, matrons, seamstresses, etc., in the Indian service. A few receive appointments as stenographers and typewriters in the departmental service, and a few are appointed to technical and professional places.

Preference Claimants.—Persons who served in the military or naval service of the United States, and were discharged by reason of disabilities resulting from wounds or sickness incurred in the line of duty, are, under the civil service rules, given certain preferences. They are released from all maximum age limitations, are eligible for appointment at a grade of 65, while all others are obliged to obtain a grade of 70, and are certified to appointing officers before all others. Subject to the other conditions of the rules, a veteran of the rebellion or of the war with Spain, or the widow of any such person, or any army nurse of either war, may be reinstated without regard to the length of time he or she has been separated from the service.

Dismissals and Removals.—The civil service rules provide that no person in the executive civil service shall dismiss, or cause to be dismissed, or make any attempt to procure the dismissal of or in any manner change the official rank or compensation of any other person therein, because of his political or religious opinions or affiliations; that no removal shall be made from any position subject to competitive examination except for just cause and upon written charges filed with the head of the department or other appointing officer, and of which the accused shall have full notice and an opportunity to make defense; and that no person in the executive civil service shall use his official authority or official influence for the purpose of interfering with an election or controlling the result thereof. Such rules also provide that any person in the executive civil service who shall wilfully violate any provision of the civil service act or rules shall be dismissed from office.

Political Assessments.—The civil service act contains provisions forbidding any person in the service of the United States from levying upon or collecting from persons in the executive civil service contributions to be devoted to political objects, the collection of such contributions by any person in any public building of the United States, or discrimination against persons

who do not make such contributions or render political service. A violation of any of the provisions concerning political assessments, or their collection in a public building of the United States, is declared to be a misdemeanor, punishable by a fine not exceeding five thousand dollars, or by imprisonment for a term not exceeding three years, or by such fine and imprisonment both in the discretion of the court. The act also declares that when rules to carry its provisions into effect shall have been promulgated, "it shall be the duty of all officers of the United States in the departments and offices to which any such rules may relate, to aid, in all proper ways, in carrying said rules, and any modifications thereof, into effect."

Publications of the Commission.—Among the publications of the commission for free distribution are the following:

Manual of Examinations, giving places and dates of examinations, rules by which papers are rated, descriptions of examinations, specimen questions, and general information.

The Civil Service Act, Rules and Regulations.

The Annual Reports of the Commission, showing its work. These annual reports, of which nineteen have been issued, may be consulted at public libraries.

PARTNERSHIP

A partnership exists when two or more persons combine their property, their labor, their skill, or all of these in business, to share the gains and losses in certain proportions.

The Firm is the name, style or title under which the partners do business, and also means the partners themselves, taken collectively. The firm name should be set forth in the articles.

DIFFERENT KINDS OF PARTNERSHIP

A General Partnership is constituted between individuals if they agree to enter into a general or particular business, to share the profits and losses together without fixing any limitations or conditions.

A Special or Limited Partnership is an agreement entered into to allow a *special* partner, whose name does not appear in that of the firm, to put in a limited amount of capital and to receive a corresponding share of the profits, and be held correspondingly responsible for the contracts of the firm.

Such partnerships were unknown to the common law, and

the limitation of liability is secured in this country only by strict compliance with the particular requirements of the statutes of the several States on the subject.

The statutes generally require such a partnership to be defined in a certificate, acknowledged like a deed, which must set forth the firm name, nature of business, names of general and special partners, distinguished as such, and the amount which each special partner contributes.

An Ostensible Partner is one who is known as such to the world-

A Secret Partner is one who is not openly or generally so declared. He is not liable for debts contracted after his retirement, although he has given no notice of the same.

A Dormant or Silent Partner is one who takes no part in the transaction or control of the business, but shares in the profits and losses according to certain agreements.

A Nominal Partner is held out to the world as such without actually participating in the profits and losses of the business.

HOW PARTNERSHIPS ARE FORMED

All persons who are legally competent to do business for themselves may enter into partnership.

A partnership may be formed by a mere verbal agreement and stand in law, but a written agreement is the only safe one, and he who neglects it will doubtless have reason to regret it later.

The parties may agree as they please as to sharing profits or losses, but in the absence of writing to prove the contrary the law will assume that partners share profits and losses equally.

The articles of agreement should be drawn up with special care in writing the details of conditions, liabilities and proportionate share of profits or loss fully stated.

How Soon a Partnership is in Force.—It is presumed that a partnership commenced at the time the articles of copartnership are drawn unless otherwise stated.

Use of Name in Partnership.—When a partner withdraws from a firm, but allows his name to be used as before, or if one lends his name to a firm, in either case he is held responsible to third persons as a partner.

Suing Partners.—It is generally supposed that one partner cannot sue another. This is not wholly true. A partner can sue for a balance due him after settlement of general accounts or for a balance due him on some specific account. It is, how-

ever, best to appeal to a court of equity, for that court can do for partnership what the law cannot do.

DISSOLUTION OF PARTNERSHIP

A partnership may be dissolved by mutual consent, by expiration of predetermined time, by death of one of the partners, by insanity, by the bankruptcy of either partner, or by the court for any good cause, such as dishonesty of one partner against the rest, or incapacity caused by habitual drunkenness or conviction of any crime.

A partner may withdraw at any time if no time for the continuation of the partnership is mentioned in the articles of agreement, but he must give due notice of his intention to the other partners.

If the time for the continuance of the partnership is mentioned, a partner can nevertheless withdraw at any time, but he is responsible to the firm for damages caused by the breach of his promise.

If a partner dies the surviving partners alone have the right to settle up the business. To his heirs and legal representatives they need only to render an account of the business.

Notice to be Given.—Upon the dissolution of a partnership by mutual consent it should be indorsed on the articles of copartnership and a notice given in some prominent newspaper. Special notice should also be sent to each one of the creditors of the firm.

Authority of Partners.—As a general rule the whole firm and each member of it is bound by the acts and contracts of one partner, because in the eye of the law the act or contract of one is regarded as the act of all. Each is regarded as the agent of all without any express authority being given. Thus, loans, purchases, sales, assignments, pledges, or mortgages effected by one partner on the partnership account, and with good faith in the third party, are binding on all the firm.

So is also release by one a release; notice to one is notice to all; demand of one is demand of all. In matters, however, not connected with the partnership, but intended for his own personal interests, the firm is not bound.

Liability of the Several Partners.—For the payment of partnership debts the property of the firm, both real and personal, as also that of each individual partner, is held responsible for amount of the unpaid partnership debt.

Partners in order to bind all must act in unison; two members of a firm cannot conclusively bind a third. If one of my partners were about making a trade with A. of which I do not approve, and I thus express my dissent to A the trade if consummated will not bind me, provided I give notice in time to prevent A from entering ignorantly into it.

Individual Debts of Partners.—If a partner has individual debts, then his interest in the firm is held responsible for them, after the debts of the firm have been paid. The liabilities of the firm, however, always have the first claim upon its own property.

Liabilities of a New Partner.—A new partner is not responsible for debts of the firm contracted by the same previous to his admission.

Selling of a Partner's Interest.—No partner can sell his interest to an outside party, in order to have him take his place, without the consent of the other partner.

Authority of Partners after the Partnership is Dissolved.—After dissolution each partner has the right to settle up the business, unless the partners agree otherwise and give due notice thereof. He can, however, create no new obligations, but only settle up the old ones. The statute law of the State should be carefully complied with in this respect.

The following forms will serve as models for drawing up articles of copartnership

Articles of Copartnership

Articles of Agreement made and concluded this first day of January, in the year A. D. one thousand nine hundred and four, between Henry R. Raymer, of the first part, and Charles B. Werner, of the second part, both of the City of Cincinnati, County of Hamilton, State of Ohio.

The said parties have agreed to associate themselves as copartners for the purpose of carrying on the General Dry Goods Business at No. 450 Cleve-

land Avenue, in the City of Cincinnati.

1. The name, title, and style of such partnership shall be Raymer & Werner and it shall continue three years from date hereof, except in case of the death of either of the said partners within the said term.

2. That the said Henry Raymer contribute Six Thousand Dollars (\$6,000)

and the said Chas. Werner Two Thousand Dollars (\$2,000).

3. All the net profits arising out of the business shall be divided in the following proportions: Three-fourths to the said Raymer and one-fourth to the said Werner.

4. That books of account shall be kept, in which shall be entered a full and exact account of all purchases, sales, transactions, and accounts of said firm, and which shall always be open to the inspection of both parties and their legal representatives respectively.

5. That the said Henry Raymer shall have exclusive charge of all the buying for the firm.

6. Each partner shall devote all his time to the said business and will use his best efforts to make the business successful and promote the interests of the firm in every way.

7. Neither party shall assume any obligation or liability in the name of the firm for the accommodation of any other person or persons whatsoever without the consent of the other party; nor shall either party lend any of the funds of the firm without the consent of the other partner.

And it is further agreed that if either party violates any of the aforesaid articles of agreement the other shall have the right to dissolve this copartner-ship immediately upon becoming informed of such violation.

In Witness Whereof, we have hereunto set our hands and seals the day and year above written.

HENRY R. RAYMER, [SEAL] CHARLES B. WERNER. [SEAL]

Executed and delivered in the presence of

H. R. Burrows,

B. M. MILLER.

Articles of Limited Partnership

Articles of Partnership agreed upon this first day of May, A. D. 1904, between Henry R. Raymer of the first part, and Charles B. Werner, of the second part.

The parties hereto agree to form a limited partnership, under the law providing for limited partnerships, under the style of Henry R. Raymer, as retail dealers in dry goods, to be conducted in the City of Cincinnati, County of Hamilton, State of Ohio, to commence this day and continue three years,

Henry R. Raymer is to be the general partner, and contribute to the capital \$4,000. He is to have charge and management of the business and devote his time and attention to it, and use his best exertions to make it profitable. He is to keep correct and proper books of account, in a proper manner, to show all the partnership transactions which are to be open for examination to said Werner at all times, and shall communicate to said Werner, from time to time, all information that he may desire as regards the business

Charles B. Werner is to be the special partner, and, at the time of executing these articles, has contributed to the capital eight thousand dollars (\$8,000) in cash to the common stock.

From the profits, if any, each partner is to receive the interest upon his contribution to the capital, and the residue of the profit is to be divided between them. An accounting is to be had once in six months, the profits and losses ascertained, and the losses, if any, are to be borne by the partners in proportion to their respective contributions to the capital.

HENRY R. RAYMER, [SEAL] CHARLES B. WERNER. [SEAL]

Executed and delivered in the presence of
H. R. Burrows,
B. M. MILLER.

Certificate of Limited Partnership

This is to Certify, That the undersigned have, pursuant to the provisions of the statutes of the State of Ohio, formed a limited partnership under the firm name of Henry R. Raymer, that the general nature of the business to be transacted is that of retail dealers in dry goods; that it is to be conducted in the City of Cincinnati; that Henry R. Raymer is the general partner and Charles B. Werner the special partner; that the said Charles B. Werner has contributed the sum of eight thousand dollars as capital toward the common stock; and that said partnership is to begin on the first day of May, A. D. 1904, and is to terminate on the first day of May, A. D. 1907.

Dated this first day of May, 1904.

HENRY R. RAYMER, CHARLES B. WERNER.

CITY OF CINCINNATI, S8

On the first day of May, 1904, before me came Henry R. Raymer and Charles B. Werner, to me known to be the individuals described in and who executed the above certificate, and they severally acknowledged that they executed the same.

[SEAL]

WILLIAM LORRIMER, Notary Public.

Dissolution of Partnership

We the Undersigned do mutually agree that the within mentioned partnership be and the same is hereby dissolved, except for the purpose of the final liquidation and settlement of the business thereo and upon such settlement wholly to cease and terminate.

In witness whereof, we have hereunto set our hands and seals this first day of January, 1905.

HENRY R. RAYMER, [SEAL] CHAS. B. WERNER. [SEAL]

Signed, sealed, and delivered in presence of
FRED PORTER,
ALLEN MORTEN.

Notice of Dissolution

Notice is hereby given that the partnership heretofore existing between Henry R. Raymer and Chas. B. Werner, of Cincinnati, Ohio, under the firm name of Raymer & Werner, is this first day of January, 1905, dissolved by mutual consent.

HENRY R. RAYMER, CHAS. B. WERNER.

The business will be continued at Cincinnati by Henry R. Raymer, who is authorized to settle the affairs of the said firm.

Cincinnati, January 1, 1905.

PASSPORTS

A passport is a written permit to citizens of this country to travel unmolested in any foreign country. It recommends them to the protection of foreign governments where they may visit.

The Secretary of State of the United States, at Washington, is alone properly authorized to issue passports in the United States, but the ministers and other diplomatic representatives of our government abroad may grant, issue and verify them.

Application for a passport by a person in one of the insular possessions of the United States should be made to the chief executive of such possession.

None but citizens of the United States can receive passports. The charge is \$5.00.

Any officer granting unlawfully a passport subjects himself to punishment by fine or imprisonment.

Passports may be issued by collectors of customs to United States vessels visiting foreign ports; and the master of a ship who sails without one to a foreign port makes himself liable to punishment.

The name, age and residence of the applicant, with a description of his personal appearance, are entered in it, to properly identify him.

PATENTS, TRADE MARKS AND COPYRIGHTS

PATENTS

A patent is a written instrument issued by the national government, giving the inventor the exclusive right to use, manufacture and sell his invention or improvement for a given term of years within the United States.

Without such a patent on his part any one else can use or sell anything he has invented. A patent secures to him the exclusive right.

A patent lasts for seventeen years; after that any one can make, use or sell the thing patented.

The patent is designed to encourage and protect inventions.

How Obtained.—To obtain a patent, application must be made to the Commissioner of Patents, accompanied by carefully prepared papers and drawings, describing the invention. These are examined by the government officers to see whether the case is a proper one for a patent, and if it is, the patent (also called letters patent) is signed and sent to the inventor. Foreigners may also obtain patents as well as citizens of the United States.

A complete application comprises the petition, specification, oath and drawings and the model of specimen when required.

The Specifications.—In framing the specification it is well to pursue the following order:

- 1. Preamble giving the name and residence of the applicant and the title of the invention.
 - 2. General statement of the object and nature of the invention.
- 3. Brief description of the drawings, showing what each view represents, unless no drawing is practicable.
- 4. Detailed description, explaining fully the alleged invention and the manner of constructing, practicing, operating and using it.
 - 5. Claim or claims.
 - 6. Signature of inventor.
 - 7. Signatures of witnesses.

The Oath.—The applicant, if the inventor, must make oath that he believes himself to be the first and original discoverer or inventor of the art, machine, manufacture, composition or improvement for which he desires a patent; and that to his best knowledge and belief the same was never before known or used.

Drawings.—The applicant for a patent must furnish a drawing of his invention where the nature of the case admits of it. Drawings must be made upon pure white bristol board. The size of the sheet must be exactly ten by fifteen inches, leaving a margin of one inch all around the drawing.

All drawings must be made with a pen and with India ink.

The inventor's signature must be placed at the lower right-hand corner of the sheet and those of the witnesses at the lower left-hand corner.

Drawings should be rolled, not folded.

Models must clearly exhibit every feature of the machine which forms the subject of the claim, but no other matter except for illustration.

A working model is best where it can be furnished.

Amendments.—The applicant has a right to amend before or after the first rejection, and he may amend as often as the examining officers present any new references or reasons for rejection.

In case an applicant does not prosecute his application for two years after the date when the last official notice was made to him, it will be held that the application has been abandoned.

Extensions.—Patents since March 2, 1861, cannot be extended except by Congress.

Assignments.—Every patent or any interest therein shall be assignable in law by an instrument in writing. The patentee or his assigns may also grant and convey in like manner an exclusive right under his patent for the whole or any specified part of the United States.

Mark.—Every patented article, before it is sold, must be marked *patented*, so as to give notice to every one that it is patented.

Infringement is the making, using or selling the patented article without the permission of the owner of the patent. Its consequences are twofold: (1) The infringer must pay to the owner of the patent whatever damages the latter suffers through the infringement, equivalent usually to the profits which the infringer has made; (2) the court will compel the infringer to stop. By these two methods the exclusive right is enforced.

Fees Required by Law

- 1. Application.—On filing each original application for a patent except in design cases, fifteen dollars.
- 2. Original Patent.—On issuing each original patent, except in design cases, twenty dollars.
- 3. In Design Cases.—For three years and six months, ten dollars; for seven years, fifteen dollars; for fourteen years, thirty dollars.
 - 4. Caveat.—On filing each caveat, ten dollars.
- 5. Re-Issue of Patents.—On every application for the reissue of a patent, thirty dollars.
 - 6. Disclaimer.—On filing each disclaimer, ten dollars.
- 7. Extension of Patent.—On every application for the extension of a patent, fifty dollars.
- 8. Grant of Extension.—On the granting of every extension of a patent, fifty dollars.
- 9. First Appeal.—On an appeal for the first time from the primary examiners to the examiner-in-chief, ten dollars.
- 10. Every Appeal.—On every appeal from the examiner-inchief to the commissioner, twenty dollars.
 - 11. Certified Copies of Patents.—For certified copies of patents

and other papers, including certified printed copies, ten cents per hundred words

- 12. Recording.—For recording every assignment, agreement, power of attorney, or other paper, of three hundred words or under, one dollar; of over three hundred and under one thousand words, two dollars; of over one thousand words, three dollars.
- 13. Copies of Drawing.—For copies of drawings, the reasonable cost of making them.
- 14. Full Information.—These fees may be paid to the Commissioner of Patents, or to the Treasurer or any of the assistant treasurers of the United States. If you desire to secure a patent write to the Commissioner of Patents, Washington, D. C., and you will receive all the necessary papers, blanks, and complete instructions and directions.

CAVEATS

A caveat, under the patent law, is a notice given to the office of the caveator's claims as inventor, in order to prevent the grant of a patent to another for the same alleged invention upon an application filed during the life of a caveat without notice to the caveator.

Any person who has made a new invention or discovery, and desires further time to mature the same, may, on payment of a fee of ten dollars, file in the patent office a caveat setting forth the object and the distinguishing characteristics of the invention, and praying protection of his right until he shall have matured his invention. Such caveat shall be filed in the confidential archives of the office and preserved in secrecy, and shall be operative for the term of one year from the filing thereof. The caveat may be renewed, on request in writing, by the payment of a second fee of ten dollars, and it will continue in force for one year from the payment of such second fee.

The caveat must comprise a specification, oath, and when the nature of the case admits of it, a drawing, and, like the application, must be limited to a single invention or improvement.

TRADE MARKS

A trade mark is a mark, emblem or symbol which a merchant or manufacturer uses to denote his own goods. It is usually attached to them and may be in the form of letters, words or ornamental designs. The Right Acquired in a trade mark is the exclusive right to use it, or, in other words, the right to keep others from using that trade mark.

The right may be acquired by a citizen or foreigner and lasts as long as the trade mark is used.

Its Object is to protect both the owner and the public against imitations of an article which has acquired a good reputation. If it were not for this exclusive right, others might place the same mark on their goods, and thus deceive the public into believing they were manufactured by the same firm. This would deprive the one who had built up the trade of the benefit of his industry and skill or defraud the public into buying an inferior article.

Acquiring a Trade Mark.—Copyrights cannot be granted upon trade marks or labels intended to be used for any articles of manufacture.

If protection for such names or labels is desired, application must be made to the patent office, where they are registered, if admitted, at a fee of six dollars for labels and twenty-five dollars for trade marks

Infringement of a trade mark is prevented in the same way as in the case of patents, viz., by a suit against the infringer for damages and for an injunction to compel him to cease using it.

What Cannot be Used as a Trade Mark.—A generic name of an article cannot be used as a trade mark. A name merely descriptive, or representing the kind, quality, ingredients or characteristics of the article, is not available as valid trade marks. Geographical names used in their proper sense cannot become valid trade marks.

COPYRIGHT

Copyright is defined by the act of Congress of 1874 as the liberty of printing, publishing, compiling, executing and vending any original book, map, chart, dramatic or musical composition, engraving, print, photograph or negative thereof, or of a painting, drawing, chromo, statue or statuary and of models or designs intended to be perfected as works of art.

The object of such copyright is to encourage the writing of books or the production of anything that may conduce to the advancement of art and literature and the general improvement of mankind.

Copyright Laws

As Revised by an act of Congress, including the provisions for foreign copyright, of March 3, 1891.

1. How Obtained.—A printed copy of the title of the book, map, chart, dramatic or musical composition, engraving, cut, print, photograph or chromo, or a description of the painting, drawing, statue, statuary or model or design for a work of the fine arts, for which copyright is desired, must be delivered to the Librarian of Congress or deposited in the mail, within the United States, prepaid, addressed

Librarian of Congress, Washington, D. C.

This may be done on or before the day of publication in this or any foreign country.

The style of print is immaterial; that of a typewriter will be accepted.

The printed title required may be a copy of the title page of such publications as have title pages. In other cases the title must be printed expressly for copyright entry, with name of claimant of copyright. But a separate title is required for each entry, and each title must be printed on paper as large as commercial note—The title of periodical must include the date and number, and each number of the periodical requires a separate entry of copyright.

Full Name.—Every applicant for copyright should state distinctly the full name and residence of the claimant and whether the right is claimed as author, designer or proprietor. No affidavit or witness to the application is required.

2. Copyright Fees.—The legal fee for recording each copyright claim is fifty cents, and for a copy of this record (or certificate of copyright under seal of the office) an additional fee of fifty cents is required, making one dollar, if certificate is wanted, which will be mailed as soon as reached in the records.

For publications which are the productions of persons not citizens or residents of the United States the fee for recording title is one dollar, and fifty cents additional for a copy of the record.

Copies Required.—Not later than the day of publication in this country or abroad, two complete copies of the best edition of each book or other article must be delivered or deposited in the mail within the United States, addressed to Librarian of Congress. Washington, D. C. Must Be American.—Books must be printed from type set in the United States or from plates made therefrom; photographs from negatives made in the United States; chromos and lithographs from drawings on stone or transfers therefrom made in the United States.

Penalty.—Without the deposit of copies above required the copyright is void and penalty of twenty-five dollars is incurred. No copy is required to be deposited elsewhere.

New Edition.—The law requires a copy of each new edition wherein any substantial changes are made to be deposited with the Librarian of Congress.

Notice by Imprint.—No copyright is valid unless notice is given by inserting in every copy published, on the title page or following, if it be book, or if a map, chart, musical composition, print, cut, engraving, photograph, painting, drawing, chromo, statue, statuary, or model or design intended to be perfected as a work of the fine arts, by inscribing upon some portion thereof or on the substance on which the same is mounted the following words, viz., "Entered According to Act of Congress in the Year ——, by ———, in the office of the Librarian of Congress at Washington," or the words "Copyright, 19—, by ———."

Penalty for False Claim.—The law imposes a penalty of one hundred dollars upon any person who has not obtained copyright who shall insert the notice, "Entered According to Act of Congress" or "Copyright," or words of the same import in or upon any book or article.

Translation, Etc.—The copyright law secures to authors and their assigns the exclusive right to translate or to dramatize any of their works; no notice or record is required to enforce this right.

Duration of Copyright.—The original term of copyright runs for twenty-eight years. Within six months of the end of that time the author or designer, or his widow or children, may secure a renewal for the further term of fourteen years. Applications for renewal must be accompanied by a printed title and fee and by explicit statement of ownership in the case of the author or relationship in the case of his heirs, and must state definitely the date and place of entry of the original copyright. Within two months from date of renewal the record thereof must be advertised in an American newspaper for four weeks.

Time of Publication.—A copyright may be secured for a projected work as well as for a completed work. The publication must, however, take place "within a reasonable time."

Assignments.—Copyrights are assignable by any instrument of writing. Such assignment must be recorded in the office of the Librarian of Congress within sixty days from execution. The fee for this record is one dollar and for a certificate copy of assignment one dollar. A duplicate copy of any copyright record costs fifty cents.

Works of More than One Volume must have a copyright entered for each volume. Two copies of each volume should be sent. So also of the successive numbers of a periodical or other articles produced in serials.

International Copyright.—The provision as to copyright entry in the United States by foreign authors, etc., by act of Congress approved March 3, 1891 (which took effect July 1, 1891), is the same as the foregoing, except the difference in the cost, as stated above.

The right of citizens or subjects of a foreign nation to copyright in the United States extends by presidential proclamation to Great Britain, France, Belgium, Switzerland, Germany, Italy, Denmark and Portugal; and Americans can secure copyrights in those countries by making their arrangements there in conformity with the laws of those countries. The Librarian of Congress cannot take charge of any foreign copyright business.

Foreign Copyright.—Americans to obtain a copyright in Great Britain must have title entered at Stationer's Hall, London, the fee for which is five shillings sterling, and five shillings additional if a certified copy of entry is required. The work must be published in Great Britain or in her dominions simultaneously with its publication in the United States, and five copies of the publication are required, one for the British Museum and four on demand of the Company of Stationers for four other libraries. Copyright may be secured in France by an American by publishing two copies of the publication at the Ministry of the Interior at Paris. No fee or entry title required. Copyright in Canada is to be registered with the Minister of Agriculture at Ottawa; fee, one dollar for registry and fifty cents for certificate, and the work to be published in Canada and two copies deposited.



KNOTS ARE MORE EASILY TIED THAN UNTIED

MARRIAGE AND DIVORCE

MARRIAGE LAWS

License.—Marriage licenses are required in all the States and territories except Alaska, New Jersey (if residents, otherwise required), New Mexico, New York, and South Carolina.

Age to Contract Without Consent of Parents.—In most of the States which have laws on the subject twenty-one years is the age for males; in California, Delaware, Idaho, Maryland, New York and Dakota, eighteen; in Tennessee, sixteen; and for females, twenty-one years in Florida, Illinois, Iowa, Kentucky, Louisiana, Minnesota, Montana, Nebraska, North Carolina, Pennsylvania, Rhode Island, South Carolina, South Dakota, Utah, Virginia, West Virginia, Wisconsin, and Wyoming, and eighteen in all the other States having laws, except Delaware, District of Columbia, Idaho, Maryland, New York, and Tennes-

see, in which it is sixteen years, and California and North Dakota, fifteen.

Voidable.—Marriages are voidable in nearly all the States when contracted under the age of consent to cohabit, through fraud, or if one of the parties is suffering from insanity.

Prohibition of.—Marriages between whites and persons of negro descent are prohibited and punishable in Alabama, Arizona, Arkansas, California, Colorado, Delaware, Florida, Georgia, Idaho, Indiana, Indian Territory, Kentucky, Louisiana, Maryland, Mississippi, Missouri, Nebraska, North Carolina, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Utah, Virginia, and West Virginia.

Marriages between whites and Indians are void in Arizona, North Carolina, Oregon, and South Carolina.

Marriages between whites and Chinese are void in Arizona, California, Mississippi, Oregon, and Utah.

Marriage between first cousins is forbidden in Alaska, Arizona, Arkansas, Illinois, Indiana, Indian Territory, Kansas, Missouri, Nevada, New Hampshire, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Washington, and Wyoming, and in some of them is declared incestuous and void, and marriage with step-relatives is forbidden in all the States except Florida, Hawaiian Islands, Iowa, Kentucky, Minnesota, New York, Tennessee, Wisconsin.

Connecticut and Minnesota prohibit the marriage of an epileptic, imbecile, or feeble-minded woman under forty-five years of age, or cohabitation by any male of this description with a woman under forty-five years of age, and marriage of lunatics is void in the District of Columbia, Kentucky, Maine, Massachusetts, Nebraska; persons having sexual diseases in Michigan.

DIVORCE LAWS

Previous Residence Required.—Six months in Idaho, Nebraska, Nevada, South Dakota, and Texas; one year in Alabama, Arizona, Arkansas, California, Colorado (except in case of adultery in State), Georgia, Illinois, Indian Territory, Iowa, Kansas, Kentucky, Maine, Michigan, Minnesota (same as Colorado), Mississippi, Missouri, Montana, New Hampshire, New Mexico, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Utah,

Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming; two years in District of Columbia, Florida, Indiana, Maryland, Rhode Island, and Tennessee; three years in Alaska, Connecticut, and Massachusetts (if when married both parties were residents; otherwise five years); five years in North Carolina; actual residence at time of bringing suit in Delaware, Louisiana, New Jersey, and New York (if married in the State).

Absolute, Causes for.—The violation of the marriage vow is cause for absolute divorce in all the States and territories, except South Carolina, which has no divorce laws.

The living of husband or wife at the time of the second marriage is a cause in most States, and physical incapacity in all the States except California, Connecticut, Idaho, Iowa, Louisiana, New York, North Dakota, South Carolina, South Dakota, and Vermont. In most of these States it renders marriage voidable.

Willful desertion, one year in Arkansas, California, Colorado, Florida, Idaho, Indian Territory, Kansas, Kentucky, Minnesota, Missouri, Montana, Nevada, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Washington, Wisconsin, and Wyoming; two years in Alabama, Alaska, Arizona, Illinois, Indiana, Iowa, Michigan, Mississippi, Nebraska, New Jersey, Pennsylvania, and Tennessee; three years in Connecticut, Delaware, Georgia, Hawaiian Islands, Maine, Maryland, Massachusetts, New Hampshire, Ohio, Texas, Vermont, Virginia, and West Virginia; five years in Rhode Island, though the court may decree a divorce for a shorter period. Both parties living apart without cohabitation, five years, in Kentucky; ten years, Rhode Island; no time specified in Louisiana and New Mexico.

Habitual drunkenness in all the States and territories, except Arizona, Maryland, New Jersey, New York, North Carolina, Pennsylvania, South Carolina, Texas, Vermont, Virginia, and West Virginia. "Intoxication from the use of intoxicating liquors, opium, or other drugs," in Maine, Massachusetts, Mississippi, and North Dakota.

"Imprisonment for felony," or "conviction for felony," in all the States and territories (with limitations), except Florida, Maine, Maryland, New Jersey, New York, North and South Carolina.

"Cruel and abusive treatment," "intolerable cruelty," "extreme cruelty," "repeated cruelty," or "inhuman treat-

ment, "in all the States, except District of Columbia, Maryland, Michigan, New Jersey, New York, North and South Carolina, Tennessee, Virginia, and West Virginia, and discretionary in Georgia; treatment seriously injuring health or endangering reason, in New Hampshire.

Failure by the husband to provide, one year in California, Colorado, Idaho, Montana, Nevada, North Dakota, and Wyoming; two years in Arizona, Indiana, and Nebraska; three years in New Hampshire; no time specified in Maine, Massachusetts, Nebraska, New Mexico, Rhode Island, South Dakota, Utah, Vermont, and Washington

Fraud and fraudulent contract, in Connecticut, Delaware, Georgia, Kansas, Kentucky, Ohio, Oklahoma, Pennsylvania, and Washington.

Absence without being heard from, three years in New Hampshire and Ohio; seven years in Connecticut and Vermont; voluntary separation, five years in Wisconsin; ten years in Rhode Island.

"Ungovernable temper," in Kentucky; "habitual indulgence in violent and ungovernable temper," in Florida; "cruel treatment, outrages, or excesses as to render their living together insupportable," in Arkansas, Kentucky, Louisiana, Missouri, and Texas; "indignities as render life burdensome," in Missouri, Oregon, Pennsylvania, Washington, and Wyoming; attempt to murder the other party, in Illinois, Louisiana, and Tennessee; "pregnancy at the time of marriage without husband's knowledge or agency," in Alabama, Arizona, Georgia, Kansas, Kentucky, Mississippi, Missouri, New Mexico, North Carolina, Oklahoma, Tennessee, Virginia, and West Virginia.

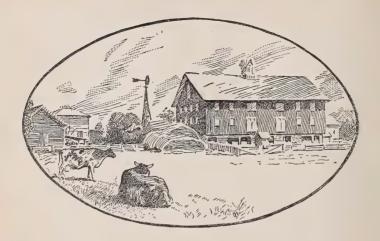
Insanity or idiocy at time of marriage, in Georgia, Mississippi, and Virginia; insanity lasting ten years, in Washington; in Florida, four years; insanity and six years' confinement in an asylum, on six years' residence, in Idaho; permanent insanity in Arkansas and Indian Territory.

Other causes in different States are as follows: "Commission of the crime against nature," in Alabama; "husband notoriously immoral before marriage, unknown to wife," in West Virginia; "fugitive from justice," in Louisiana, North Carolina, and Virginia; "gross misbehavior or wickedness," in Rhode Island; "any gross neglect of duty," in Kansas, Ohio, and Oklahoma; "refusal of wife to remove into the State," in Tennessee; "joining any religious sect that believes marriage unlawful, and refusing

to cohabit," in Kentucky, Massachusetts, and New Hampshire; "vagrancy of the husband," in Missouri; "refusal of wife to cohabit for twelve months." in North Carolina: "excesses." in Texas: "where wife by cruel and barbarous treatment renders condition of husband intolerable." in Pennsylvania: "concealment of sexual disease," in Kentucky; obtaining divorce in another State, in Michigan and Ohio; "conviction of a felony prior to marriage," in Arizona, Missouri, Virginia, and West Virginia; "incurable Chinese leprosy," in Hawaiian Islands; "offering indignities, rendering conditions intolerable," in the Indian Territory; voluntary separation for five years, in Wisconsin. Public defamation of other party, in Louisiana. Georgia an absolute divorce is granted only after the concurrent verdict of two juries, at different terms of the court. In New York absolute divorce is granted for but one cause, adultery. Collusion and connivance bar a divorce, also any condonation of a violation of the marriage vow.

Startling Facts.—The statistics tell a story of marital disruption that seems almost incredible. In Ohio, one divorce in every twenty-five marriages was the ratio in 1870, and one divorce in eight marriages the ratio in 1902. Other states might be cited as illustrative of the tendency to seek relief from 'marital responsibilities and incompatibilities in the courts. In 1867 Indiana had 1,096 divorces, the largest number for that year in any State. In 1900 the number had increased to 4,699, or one to every 5.7 marriages of the year. Michigan divorces increased from 449 in 1867 to 1,339 in 1886 and 2,418 in 1900. The ratio in that State is now one divorce to eleven marriages. granted 1,071 divorces in 1867 and 2,606 in 1886. Connecticut and Vermont appear to be the only States in which the divorce evil has been checked. The former State had fewer divorces in 1900 than in 1867. Changes in the statutes and in the administration of the various county courts largely account for improved conditions in these States.

Alarming Increase.—In the United States during the twenty years from 1867 to 1886 there were 328,716 divorces granted, representing an increase of 157 per cent, while the population increased little more than 60 per cent. In contrast to this picture it is interesting to contemplate the divorce statistics of Canada. In the latter country sixty-nine divorces were granted in the thirty-four years between 1867 and 1901.



FARMS AND FARMING

FARM STATISTICS

(CENSUS OF 1900)

The following agricultural statistics of the United States 1900:	are for June 1,
Farms, total number	5,739,657
Farms with buildings	5,537,731
Acreage, total	841,201,546
Acreage, improved	414,793,191
Acreage, unimproved	426,408,355
Value of farm property	\$20,514,001,838
Value of land and improvements	
Value of buildings	3,660,198,191
Value of implements and machinery	761,261,550
Value of live stock	3,078,050,041
Value of products in 1899	4,739,118,752
Value of products fed to live stock in 1899	974,941,046
Value of products not fed to live stock in 1899	3,764,177,706
Expenditures in 1899 for labor	365,305,921
Expenditures in 1899 for fertilizers	54,783,757
Number of farms operated by owners	3,713,371
Number of farms operated by cash tenants	752,920
Number of farms operated by share tenants	1,273,366
Number of farms operated by white persons	4,970,129
Number of farms operated by negroes	746,717

Time of Planting, Quantity of Seed, Etc.

NEW ENGLAND

	NEW ENGLA		
Kind of Crop.	Date of Planting.	Amount of Seed per acre.	Weeks to maturity.
Corn. Wheat Oats Barley Rye. Buckwheat White Beans. Potatoes Turnips Mangels Tobacco.	May 10 to 30. Fall or Spring April to May April to June 20 Apr. to May, Sept June 1 to 20. May to June April 15 to May 1. July 1 to August 3. April 15 to May 5. Seed bed, April	8 to 12 qts 2 bush. 2 to 3 bush. do. 5 to 6 peeks. 1 to 1‡ bush. 8 to 16 qts 8 to 20 bush. 1 lb. 4 to 6 lb.	14-17 20 11-15 10-15 40 10-15 8-14 12-20 10 17-22 9-12
	MIDDLE STA		
Oats Barley Rye Buckwheat White beans Potatoes	April 20 to May 30. Sept. 20 to Oct. 20. March to May March to May Sept. 1 to Oct. 1. June to July May to June March to May	6 to 8 qts. 2 bush. 2 to 2½ bushdo 1½ bush. ½ to 1½ bush. 1½ bush. 1½ bush. 10 to 12 bush. 10 to 12 bush. 4 to 8 oz. 2 to 5 lbs 10 to 15 bush. 20 qts 6 to 8 qts	16-17 13-16 40-43 8-10- 13-14 14-22
Tobacco	Seed bed, March August to October February to April	6 to 8 qts 6 qts	15-20
	CENTRAL AND WEST		
Wheat Oats Dats Barley Rye Buckwheat White beans Potatoes Turnips Mangels Flax Tobacco. Hay	April 1 to June 1. Fall or Spring April 1 to May 1. Fall or Spring. Sept. 1 to 30 June. May 10 to June 10 March 15 to June 1 July 15 to August 30 April 1 to May 15. March 15 to May 15. Seed bed, March April to May SOUTHERN S	6 qts 2 bush. 2 to 3 bush. 2 bush. 1 to 2 bush. 1 to 2 bush. 1 to 6 lb. 6 to 8 lb. 2 to 3 pecks. Oz. to 6 Sq. rd 8 to 15 lb	40-42 12-14 11-13 35-40 10-12 12 10-20 10-16 22-24 15-20 15-18
Cotton			20-30
Corn. Wheat Oats Barley Rye White beans. Cabbage. Water-melons. Onions Potatoes Sweet potatoes. Pumpkins Tomatoes. Turnips Tobacco. Cow peas.	February to June Sept. to Nov. Feb. May, Sept. April to May September to October March to May Oct., March to May March 1 to May 10. Feb. 1 to April 10. Jan., Feb. 10 April May to June April 1 to May 1. Jan. 1 to Feb. 19 Feb., Aug., April Seed bed, March May 1 to July 15.	1 to 3 bush. 8 qts 2 bush. 2 bush. 2 bush. 1 to 2 bush. 1 to 2 bush. 1 to 2 bush. 2 to 7 lb 10 to 12 bush. 10 to 12 bush. 10 to 12 bush. 4 to 7 lb 4 to 9 oz. 2 to 6 lb Oz. to 6 sq. rd. 2 to 5 pecks.	20-80 18-20 43 17 17 43 7-8 16-20 16-24 11-15 12-15 17-20 14-20 8-12 18-20 6-8

Relative Number of Plants or Hills in an Acre

Giving the number in an acre when the direct and cross rows are of equal or unequal width:

In.	10 in.	12 in.	15 in.	18 in.	20 in.	2 ft.	2 <u>1</u> ft.	3 ft.	3 1 ft.	4 ft.	4½ft.	5 ft.
10 12	62726	43560										
	41817	$\frac{34848}{29040}$	27878									
20	31362	26136	20908	17424	15681							
30	20908	$21780 \\ 17424$	13939	11616	10454	8712	6969					
36 42	14935	$14520 \\ 12446$	9953	8297	7467	6223	4976	4840 4148	3565			
	11616		7744	6453	5308	4840	3872	$\frac{3630}{3226}$	2767	2420	2151	
60	10454	8712	6969	5808	5227	4356	3484	2004	2489	2178	1936	1742

Distance Traveled by a Horse in Plowing an Acre of Land

With the quantity of land worked, at the rate of 16 and 18 miles per day of 9 hours:

Width of fur- row in	Miles trav'd in plowing	Acres per	plowed day.	Width of fur- row in	Miles trav'd in plowing	Acres plowed per day.		
inches.	an acre.	18 miles.	16 miles.	inches.		18 miles.	16 miles.	
7	14 1-8 12 1-4	1 1-4 1 1-2	1 1-8 1 1-4	22 23	4 1-2 4 1-4	4	3 1-2 3 7-10	
8 9	11	1 3-5	1 1-2	24	4	4 1-5 4 1-3	3 9-10	
10 11	9 9-10	1 4-5	1 3-5 1 3-4	25 26	3 4-5	4 1-2 4 3-4	4 1-5	
12 13	8 1-4 7 1-2	2 1-5 2 1-3	1 9-10 2 1-10	27 28	3 3-5 3 1-2	4 9-10 5 3-8	4 1-2 4 1-2	
14	7	2 1-2	2 1-4	29	3 1-2	5 1-4	4 3-5	
15 16	6 1-2 6 1-6	$\begin{array}{cccc} 2 & 3-4 \\ 2 & 9-10 \end{array}$	2 2-5 2 3-5	30 31	3 1-2 3 1-5	5 3-4 5	4 4-5 5	
17 18	5 3-4 5 1-2	3 1-10 3 1-4	2 3-4 2 9-10	32 33	3 1-10	5 4-5 6	5 1-4 5 1-3	
19 20	5 1-4 4 9-10	3 1-2 3 3-5	3 1-10 3 1-4	34 35	2 9-10 2 4-5	6 1-5 6 1-3	5 1-2 5 3-5	
21	4 7-10	3 4-5	3 1-3	36	2 3-4	6 1-2	5 4-5	

Measurement of Corn

In Cob.—Two heaping bushels of corn on the cob will make one struck bushel of shelled corn. Some claim that one and one-half bushels of ear will make one bushel of shelled corn. Much will depend upon the kind of corn, shape of the ear, size of the cob, etc.

In Crib.—To measure corn in a crib, multiply the length of the crib in inches by the width in inches, and that by the height of the corn in the crib in inches, and divide the product by 2,748, and the quotient will be the number of heaped bushels of ears. If the crib flares at the sides, measure the width at the top and also at the bottom, add the two sums together, and divide by 2, which will give the mean width.

Capacity or Contents of a Granary, Bin, Crib or Wagon

Multiply the three dimensions—the length, width and depth—in feet (the inches, if any, being reduced to fractions of a foot), multiply the product by the decimal .803564, or deduct one-fifth, which is sufficiently exact for ordinary purposes, and the result is the number of bushels. Where the wagon or crib flares considerably in length or width, it will be necessary to obtain a mean dimension. This is done by taking the longest and shortest measures, with one or more intermediate ones, and dividing the sum of all by the number taken. The quotient will be the mean dimension sought. The greater the flare the larger the number of intermediate dimensions that should be taken to insure accuracy. Corn in the ear, when first cribbed, is estimated at twice the bulk of shelled corn.

Capacity of Corn-Cribs Ten Feet High

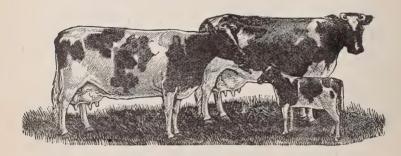
Lgth.	10	11	12	13	14	15	16	18	20	22	24	26	28	30
3 نىر	135	149	162	175	189	202	216	243	270	297	324	351	378	405
[4 3½ .∐ 4	$\frac{158}{180}$	173 198	189 216	$\frac{205}{234}$	221 252	$\frac{236}{270}$	258 288	$\frac{284}{324}$	315 360	$\frac{347}{396}$	378 432	410 468	451 504	473 540
11	203	223 248	$\frac{243}{270}$	$\frac{263}{292}$	283 315	304	$\frac{324}{360}$	$\frac{365}{405}$	405	446	448	527	567	608
3 tp 5 1	$\frac{225}{248}$	272	297	322	347	371	396	446	$\frac{450}{495}$	$\frac{495}{545}$	540 594	$\frac{585}{644}$	693	675 743
Breadth	$\frac{270}{293}$	$\frac{297}{322}$	324 351	351 380	378 410	405	432 468	$\frac{486}{527}$	540 585	594	648	$702 \\ 761$	756 819	810 878
7	315	347	378	409	441	472	504	567	630	693	756	819	882	945
$\frac{7\frac{1}{2}}{8}$	338 360	371 396	405 432	439 468	473 504	506 540	540 576	608	675 720	$\frac{743}{792}$		878 936		1013
81/2	383	421	459	497	536	574	612	689	765	842	918	995	1071	1148
9 10	$\frac{405}{450}$	446 495	486 540	526 585	567 539	607 675	$\frac{648}{720}$	729 810	810 900		1080	1170	1134 1260	1350
11 12	495 540	545 594	594 648	$\frac{643}{702}$	693 756	742 810	792 864	891 972					$\frac{1386}{1512}$	
12	940	994	040	102	150	310	001	012	1030	1100	1290	1404	1012	1020

Comparative Value of Good Hay and Other Food for Stock

100 lbs. hay are equal to	100 lbs. hay are equal to
504 lbs. turnips. 300 "carrots. 201 "uncooked potatoes. 175 "boiled potatoes. 339 "mangel-wurzel. 180 "wheat straw. 180 "barley straw. 150 "pas straw. 200 buckwheat straw. 200 green indian corn.	50 lbs. oats. 46 " wheat. 54 " rye. 64 " buckwheat. 57 - " Indian corn. 45 " peas and beans. 105 " wheat bran. 109 " rye bran. 167 " wheat, pea and oat chaff. 179 " rye and barley mixed. 68 " acorns.

Table Showing Amount of Hay or Its Equivalent Required Each Day for Every One Hundred Pounds an Animal Weighs

Fatting Oxen,	when fa	ıt	 	4.00 "
Milch Cows			 from 2	2.25 to 2.40 "
Voung Growing	r Cattle		 	3 08 "
Steers	, carno		 	2.84 "
Pigs			 	3.00 "
Sheep			 	3.00 "



How to Tell the Age of Cattle

Age of Cattle.—A cow's horn is generally supposed to furnish a correct indication of the age of the animal. This is not always true. However, for ordinary purposes, the following will be found to be approximately correct. At two years of age a circle of thick matter begins to form on the animal's horns, which becomes clearly defined at three years of age, when another circle or ring begins to form, and so on year after year. Its age then can be determined by counting the number of rings and adding two to their number. The rings on the bull's horns do not show themselves until he is five years old, so to the number of rings we must add five to arrive at his age. Unless the rings are clear and distinct, this rule will not apply. Besides, dealers sometimes file off some of the rings of old cattle to make them appear younger.

Age of Sheep and Goats.—At one year old they have eight front teeth of uniform size. At two years of age the two middle ones are supplanted by two large ones. At three, a small tooth appears on each side. At four, there are six large teeth. At five, all the front teeth are large, and at six the whole begin to get large.

To Find the Weight of Live Stock by Measurement

The only instrument necessary is a measure with feet and inch marks upon it. The girth is the circumference of the animal just behind the shoulder blades. The length is the distance from the shoulder blades. The superficial feet are obtained by multiplying the girth and length. The following table contains the rule to ascertain the weight of the animal:

If less than one foot in girth, multiply superficial feet by eight.

If less than three and more than one, multiply superficial feet by eleven.

If less than five and more than three, multiply superficial feet by sixteen,

If less than seven and more than five, multiply superficial feet by twenty hree.

If less than nine and more than seven, multiply superficial feet by thirty-three.

If less than eleven and more than nine, multiply superficial feet by forty-two.

EXAMPLE: Suppose the girth of a bullock to be six feet three inches; length five feet six inches; the superficial area will then be thirty-four, and, in accordance with the preceding table, the weight will be seven hundred and eighty-two pounds.

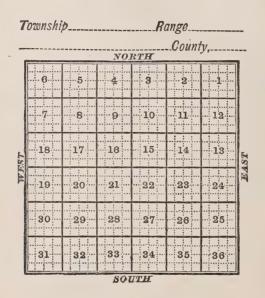
EXAMPLE: Suppose a pig to measure in girth two feet, and length one foot and nine inches. There would then be $3\frac{1}{2}$ feet, which, multiplied by eleven, gives $38\frac{1}{2}$ pounds as the weight of the animal when dressed. In this way, the weight of the four quarters can be substantially ascertained during life.

Measurement of Land

If the field be a square or parallelogram, multiply the length in rods by the width in rods, and divide by 160, the number of square rods in an acre. If the field is triangular, multiply the length of the longest side in rods by the greatest width in rods, and divide half the product by 160. If the field be of irregular shape, divide it into triangles, and find the acreage of each triangle as above. All straight-sided fields can be thus measured. Where the sides are crooked and irregular, take the length in rods in a number of places at equal distances apart, add them, and divide by the number of measurements, which will give the mean length; proceed similarly with the width, multiply the mean length by the mean width, and divide by 160. Where the field is in a circle, find the diameter in rods, multiply the square of the diameter by 7.854, and divide by 160.

To Lay Out an Acre in Rectangular Form.—An acre of land contains 160 square rods, or 43,560 square feet. Hence, to lay out an acre at right angles (square corners), when one side is known, divide the units in the square contents by the units of

the same kind in the length of the known side. Thus: if the known side be 4 rods, divide 160 by 4, and the quotient, 40, will be the depth of the acre-plot. If the length of the known side be 90 feet, divide 43,560 by 90, and the quotient, 48, will be the depth of an acre-plot.



Measurement of an Acre Plot

Either of the following measures include an acre plot:

THE STATE OF STATE STATE OF THE	THE COUNTY OF THE CASE OF THE CASE	o pacer
	7 by 22 6-7 rods.	10 by 16 rods.
4 Dy 40	8 by 20 "	11 by 14 6-11 "
5 by 32 "	9 by 17 7-8 "	12 by 13 1-3 "
6 by 26 2-3 "		· · · · · · · · · · · · · · · · · · ·

12 rods 10 feet and 8½ inches square make an acre.

Square Feet and Feet Square in Fractions of an Acre.

Fraction of an acre	Square feet.	Feet square.	Fraction of an acre.	Square feet.	Feet square.
1-16 1-8 1-4 1-3	$ \begin{array}{r} 2722\frac{1}{2} \\ 5445 \\ 10890 \\ 14520 \end{array} $	$\begin{array}{c} 52\frac{1}{2} \\ 73\frac{3}{4} \\ 104\frac{1}{2} \\ 120\frac{1}{2} \end{array}$	1 1 2	21780 43560 87120	147½ 208½ 295½

Amount of Barbed Wire Required for Fences

Estimated number of pounds of Barbed Wire required to fence space or distances mentioned, with one, two or three lines of wire, based upon each pound of wire measuring one rod $(16\frac{1}{2})$ feet).

	1 Line.	2 Lines.	3 Lines.
I Square acre 1 Side of a square acre. 1 Square half acre. 1 Square mile. 1 Side of a square mile. 1 Rod in length 100 Rods in length 100 Feet in length.	123 lbs. 36 lbs. 1280 lbs. 320 lbs. 1 lbs. 100 lbs.	72 lbs. 2560 lbs. 640 lbs. 2 lbs. 200 lbs.	38 lbs. 108 lbs. 3840 lbs. 960 lbs. 3 lbs.

Minimum Weights of Produce

The following are minimum weights of certain articles of produce according to the laws of the United States:

Per Bushel.	Per Bushel.
Wheat	
	Dried Peaches
Corn, in the ear70 "	Dried Apples
Corn, shelled	Clover Seed
Rye	Flax Seed
Buckwheat	Millet Seed
Barley	Hungarian Grass Seed50 "
Oats32 "	Timothy Seed
Peas	Blue Grass Seed
White Beans	Hemp Seed
Castor Beans	Salt (see note below)
White Potatoes60 "	Corn Meal
Sweet Potatoes	Ground Peas24 "
Onions	Malt
Turnips	Bran

Salt.—Weight per bushel as adopted by different States ranges from 50 to 80 pounds. Coarse salt in Pennsylvania is reckoned at 80 pounds, and in Illinois at 50 pounds per bushel. Fine salt in Pennsylvania is reckoned at 62 pounds, in Kentucky and Illinois at 55 pounds per bushel.

Area and Weight of Tile

The following table shows the area and the weight of the different sized tile:

Size.	Weight.	Area.	Size.	Weight.	Area.
3 in. 3½ " 4 " 5 " 6 "	5 lbs. ea. 6 " 7 " 10 " 12 "	8½ sq. in. 9½ " 14 " 21½ " 30½ "	7 in. 8 " 9 " 10 " 12 "	15 lbs. ea. 18 " 21 " 24 " 28 "	41 sq. in. 53½ 67 80½ 113

The Carrying Capacity of Tile

GALLONS PER MINUTE

	Fall per 100 Feet.									
Size of Tile.	1 in.	3 in.	6 in.	9 in.	12 in.	24 in.	36 in.			
3-inch 4-inch 6-inch 8-inch 9-inch 10-inch 12-inch	13 27 75 153 205 267 422	23 47 129 265 355 463 730	32 66 183 375 593 655 1033	40 81 224 460 617 803 1273	46 93 258 529 711 926 1468	64 131 364 750 1006 1310 2076	79 163 450 923 1240 1613 2551			

A large tile will carry more water according to its size than a small one. This is because there is less surface on the inside of the large tile compared with the size of stream, and therefore less friction. More water will flow through a straight tile than a crooked one having the same diameter.

EXAMPLE: A nine-inch tile at 6 inches fall to the 100 feet will flow 593 gals. per minute,

How to Use the Hog and Cattle Table

CATTLE.

What will be the cost of 1,170 lbs. of cattle at \$4.25 per hundredweight?

1,100 @
$$\$4.25 = \$46.75$$

70 @ $4.25 = 2.98$
Answer- $\$49.73$

Hogs.

What will be the cost of 2,750 lbs. of hogs at \$3.75 per hundredweight?

$$2,700 @ \$3.75 = \$101.25$$

 $50 @ 3.75 = 1.88$
Answer— $\$103.13$

Hog and Cattle Table

The middle column gives the number of pounds and the top of each column the price per pound or hundred weight.

1	5c		2.50	1		3.25	Weight	3.50		4.00	4.25	4.50
١	.00	.00	.08	.08		.10	3 5		.11		.13	
١	.01	.01		.14	.15	.16 .33	10	.18	.19	.20	.21	.45
1	01	.02	.38	.41	.45	.49	15	.53	.56	.60	.64	.68
ı	.01	.03		.55			20 25		.75	.80 1.00	.85 1.06	.90 1.13
1	.02	.03	.75	.83	.75	.81	30		1.13	1.20	1.28	1.35
1	.02 .02 .03	.04	.88	.96	1.05	1.14	35	1.23	1.31	1.40	1.49	1.58
1	.02	.04	1.00	1.10 1.24	1.20 1.35	1.30 1.46	40 45	1.40 1.58	1.50 1.69		1.70 1.91	1.80 2.03
1	.03	.05	1.25	1.38	1.50	1.63	ξŏ	1.75	1.88	2.00	2.13	2.25
1	.03	.06	1.38	1.51	1.65	1.79	55	1.93	2.06	2.20	2.34	2.48
1	.03	.06	1.50	1.65 1.79	1.80		60 65	2.10 2.28	2.25 2.44	2.40 2.60	2.55 2.76	2.70 2.93
1	.04	.07	1.63 1.75	1.93	1.95 2.10	2.28	70	2.45	2.63	2.80	2.98	3.15
ı	.04	.08	1.88	2.06	2.25	2.44	75	2.63	2.81	3.00	3.19	3.38
1	.04	.08	2.00	2.20 2.34	2.40 2.55	2.60 2.76	80 85	2.80 2.98	3.00 3.19	3.20 3.40	3.40 3.61	3.60 3.83
H	.05	.09	2.13 2.25	2.48	2.70	2.92	90	3.15	3.38	3.60	3.83	4 05
ı	.05	.10	2.38	2.61	2.85	3.08	95	3.33	3.56	3.80	4.04	4.28
П	.05	10	2.50	2.75	3.00	3.25 6.50	100	3 50 7.00	3.75 7.50	4.00 8.00	4.25 8.50	4.50 9.00
Ш	.15	.20	5.00 7.50	5.50 8.25	6.00 9.00	9.75	200 300	10.50	11.25	12.00	12.75	13.50
1	.20	.40	10.00	11.00	12.00	13.00	400	14.00	15.00	16.00	17.00	18.00
1	.25	.50	12.50 15.00	13.75 16.50	15.00 18.00	16.25 19.50	500 600	17.50 21.00	18.75 22.50	20.00 24.00	21.25 25.50	22.50 27.00
i	.35	.60 .70 .80	17.50	19.25	21.00	22.75	700	24.50	26.25	28.00	29.75	31.50
I	.40	.80	20.00	22.00	24.00	26.00	800	28.00	26.25 30.00	32.00	34.00	36.00
1	.45	.90 1.00	22.50	24.75	27.00	29.25	900	31.50	33.75	36,00	38.25 42.50	40.50 45.00
I	.55	1.10	25.00 27.50	27.50 30.25	30.00 33.00	32.50 35.75	1000 1100	35.00 38.50	37.50 41.25	40.00	46.75	49.50
Ħ	.60	1.20	30.00	33,00	36.00	39,00	1200	42.00	41.25 45.00	48.00 52.00	51.00	54.00
1	.65	1.30 1.40	32.50 35.00	35.75 38.50	39.00 42.00	42.25 45.50	1300 1400	45.50 49.00	48.75 52.50	52.00 56.00	55.25 59.50	58.50 63.00
1	.75	1.50	37.50	41.25	45.00	48.75	1500	52.50	56.25	60.00	63.75	67.50
Ħ	.80	1.60	40.00	44.00	48.00	52.00	1600	56.00	60.00	64.00	68.00	72.00
#	.85	1.70 1.80	42.50 45.00	46.75 49.50	51.00 54.00	55.25 58.50	1700 1800	59.50 63.00	63.75	68.00 72.00	72.25 76.50	76.50 81.00
I	.95	1.90	47.50	52.25	57.00	61.75	1900	66.50	67.50 71.25	76.00	80.75	85.50
1	1.00	2.00	50.00	55.00	60.00	65.00	2000	70.00	75.00	80.00	85.00	90.00
ı	$1.05 \\ 1.10$	$\frac{2.10}{2.20}$	52.50 55.00	57.75 60.50	63.00 66.00	68.25 71.50	$\frac{2100}{2200}$	73.50 77.00	78.75 82.50	84.00 88.00	89.25 93.50	94.50 99.00
1	1.15	2.30	57.50	63.25	69.00	74.75	2300	80.50	86.25	92.00	97.75	103.50
I	$\frac{1.20}{1.25}$	2.40	60.00	63.25 66.00	$69.00 \\ 72.00$	78.00	2400	84.00	90.00	96:00	102.00	108.00
1	$\begin{bmatrix} 1.25 \\ 1.30 \end{bmatrix}$	$\frac{2.50}{2.60}$	62.50 65.00	68.75 71.50	75.00 78.00	81.25 84.50	2500 2600	87.50 91.00		100.00 104.00		112.50 117.00
1	1.35	2.70	67.50	74.25	81.00	87.75	2700	94.50	101.25	108.00	114.75	121.50
Н	1.40	2.80	70.00	77.00	84.00	91.00	2800	98.00 101.50	105.00	112.00	119.00	126.00
	1.45 1.50	$\frac{2.90}{3.00}$	$72.50 \\ 75.00$	79.75 82.50	87.00 90.00	94.25 97.50	2900 3000	101.50	108.75	120.00	123.25	130.50
	1.55	3,10	77.50	85.25		100.75	3100	108.50	116.25	124.00		
	1.60	3.20	80.00	85.25 88.00	96.00	104.00	3200	112.00	120.00	128.00	136.00	144 00
1	1.65	3.30 3.40	82.50 85.00	90.75 93.50	99.00 102.00	107.25	3300	115.50 119.00	123.75	132.00 136.00		$148.50 \\ 153.00$
Ш	1.70 1.75	3.50	87.50	96.25	105.00	113.75	3500	122.50	131.25		48.75	
Ш	1.80	3.60	90.00	99.00	108.00	117.00	3600	126.00	135.00	144.00	153.00	162.00
	1.85 1.90	3.70 3.80		101.75 104.50	111.00 114.00	120.25	3700	129,50 133.00	138.75	148.00	157.25	$166.50 \\ 171.00$
	1.95	3.90	97.50	107.25	117.00	126.75	3900	136.50	146.25	156.00	165.75	175.50
	2.00		100.00	110.00	120.00	130.001	4000	140.00	150.00	160.00	170.00	180.00
	2.05 2.10		$102.50 \\ 105.00$		123.00 126.00			143.50 147.00				$184.50 \\ 189.00$
Ш	2.15	4.30	107.50	118.25	129:00	139.75	4300	150.50	161.25	172.00	182.75	193.50
	2.20	4.40	110.00	121.00	132.00	143.00	4400	154.00 157.50	165.00	176.00	187.00	198.00
L	4.20	£.50°	112.50	123.75	199.00,	146.25	4500	157.50	108.75	190.00	191.25	202.50

How to Find the Number of Bushels of Grain in a Bin or Box

Rule.—Multipy the length in feet by the height in feet, and then again by the breadth in feet, and then again by 8, and cut off the right hand figure. The last result will be the number of bushels

Example.—How many bushels in a bin 12 feet long, 8 feet wide and 4 feet high?

Solution.—12×8×4×8=307.2 bushels.—Answer.

To Find the Contents of a Wagon Box

A common wagon box is a little more than ten feet long and three feet wide, and will hold about two bushels for every inch in depth.

Rule.—Multiply the depth of the wagon box in inches by 2, and you have the number of bushels.

If the wagon box is 11 feet long multiply the depth in inches by 2, and add one-tenth of the number of bushels to itself.

Example.—How many bushels of grain will a wagon box hold, 20 inches deep and 10 feet long?

Solution. $-20 \times 2 = 40$. —Answer.

N.B.—A bushel to the inch is calculated for corn on the cob.

Explanations of Grain Tables

The figures in heavy type represent the weight of the load, the number of bushels and pounds over are found at the right under the kind of grain.

Example.—How many bushels in a load of wheat weighing 1490 pounds? Run down the first, or weight column, to 1490 and find opposite under "wheat" 24 bushels and 50 pounds.

Table Showing the Number of Bushels and odd Pounds in a Load of Grain.

Weig Weig	Oats.		Corn, Rye		Wheat. E		Ear Corn		Corn	Barley.		
909	Bus. Lbs	56 Bus.	Lbs.	Bus.	Lbs.	Bus.	Lbs.	75 Bus.	Lbs.	Bus.	Lbs.	
1010	31 18	18	02	16	50	14	30	13	35	21	02	
1020	31 28	18	12	17	00	14	40	13	45	21	12	
1030	32 06	18	22	17	10	14	50	13	55	21	22	
1040	32 16	18	32	17	20	14	60	13	65	21	32	
1050	32 26	18	42	17	30	15	00	14	00	21	42	
1060	33 04	18	52	17	40	15	10	14	10	22	04	
1070	33 14	19	06	17	50	15	20	14	20	22	14	
1080	33 24	19	16	18	00	15	30	14	30	22	24	
1090	34 02	19	26	18	10	15	40	14	40	22	34	
1100	34 12	19	36	18	20	15	50	14	50	22	44	
1110	34 22	19	46	18	30	15	60	14	60	23	06	
1120	35 00	20	00	18	40	16	00	14	70	23	16	
1130	35 10	20	10	18	50	16	10	15	05	23	26	
1140	35 20	20	20	19	00	16	20	15	15	23	36	
1150	35 30	20	30	19	10	16	30	15	25	23	46	
1160	36 08	20	40	19	20	16	40	15	35	24	08	
1170	36 18	20	50	19	30	16	50	15	45	24	18	
1180	36 28	21	04	19	40	16	60	15	55	24	28	
1190	37 06	21	14	19	50	17	00	15	65	24	38	
1200	37 16	21	24	20	00	17	10	16	00	25	00	
1210	37 26	21	34	20	10	17	20	16	10	25	10	
1220	38 04	21	44	20	20	17	30	16	20	25	20.	
1230	38 14	21	54	20	30	17	40	16 16	30	25 25	30	
$ egin{array}{c} 1240 \ 1250 \ \end{array} $	38 24	22	08	20	40	17 17	50 60	16	40 50		40	
1260	39 02	22 22	18	20	50			16	60	26	02	
1270	39 12 39 22	22	28	21	00	18	00 10	16	70	26 26	12 22	
1280	$\begin{array}{c c} 39 & 22 \\ 40 & 00 \end{array}$	22	38 48	21 21	10 20	18	20	17	05	26	32	
1290	40 10	23	02	21	30	18	30	17	15	26	42	
1300	40 20	23	12	21	40	18	40	17	25	27	04	
1310	40 30	23	22	21	50	18	50	17	35	27	14	
1320	41 08	23	32	22	00	18	60	17	45	27	24	
1330	41 18	23	42	22	10	19	00	17	55	27	34	
1340	41 28	23	52	22	20	19	10	17	65	27	44	
1350	42 06	24	06	22	30	19	20	18	00	28	06	
1360	42 16	24	16	22	40	19	30	18	10	28	16	
1370	42 26	24	26	22	50	19	40	18	20	28	26	
1380	43 04	24	36	23	00	19	50	18	30	28	36	
1390	43 14	24	46	23	10	19	60	18	40	28	46	
1400	43 24	25	00	23	20	20	00	18	50	29	08	
1410	44 02	25	10	23	30	20	10	18	60	29	18	
1420	44 12	25	20	23	40	20	20	18	70	29	28	
1430	44 22	25	30	23	50	20	30	19	05	29	.38	
1440	45 00	25	40	24	00	20	40	19	15	30	00	
1450	45 10	25	50:	24	10	20	50	19	25	30	10	
1460	45 20	26	04;	24	20	20	60	19	35	30	20	
1470	45 30	26	14	24	30	21	00	19	45	30	30	
1480	46 08	26	24	24	40	21	10.	19	55	30	40	
1490	46 18	26	34	24	50	21	20.	19	65	31	02	
1500	46 28	26	44	25	00	21	30.	20	00	31	12	

Table Showing the Number of Bushels and odd Pounds in a Load of Grain—Continued.

	Weig	0at		Corn, Rye 56 Lbs.		Wheat.			Corn Lbs.		Corn	Barley.		
1	al 20 5	Bus. I	Lbs.	Bus.	Lbs.	Bus.	Lbs.	Bus.	Lbs.	Bus.	Lbs.	Bus.	Lbs.	
I	1510		06	26.	54	25	100	21	40	20	10	31	22	
ı	1520	47	16	27	08	25	20	21	50	20	20.	31	32	
J	1530		26	27	18	25	30	21	60	20	30	31	42	
ı	1540		04	27	28	25	40	22	00	20	40	32	04	
1	1550		14	27	38	25	50	22	10	20	50	32	14	
1	1560		24	27	48	26	00	22	20	20	60	32	24	
١	1570		02	28	02	26	10.	22	30	20	70	32	34	
1	1580		12	28	12	26	20	22	40	21	05	32	44	
١	1590		22	28	22	26	30	22	50	21	15	33	06	
1	1600		00	28	32	26	40	22	60	21	25	33	16	
1	1610		10	28	42	26	50	23	00	21	35	33	26	
1	1620		20	28	52	27	00	23	10	21	45	33	36	
1	1630		30	29	06	27	10	23	20	21	55	33	46	
1	1640		08	29	16	27	20	23	30	21	65	34	08	
1	1650		18	29	26	27	30	$\frac{23}{23}$	40	22	00	34	18	
1	1660		28	29	36	27	40	23	50	22	10	34	28	
1	1670		06	29	46	27	50	23	60	22	20	34	38	
1	1680		16	30	00	28	00	24	00	22	30	35	00	
1	1690		26	30	10	28	10	24	10	22	40	35	10	
The same	1700		04	30	20	28	20	24	20	22	50	35	20	
İ	1710		14	30	30	28	30	24	30	22	60	35	30	
1	1720		24	30	40	28	40	24	40	22	70	35	40	
1	1730		$\tilde{0}$	30	50	28	50	24	50	23	05	36	02	
i	1740		12	31	04	29	00	24	60	23	15	36	12	
1	1750		22	31	14	29	10	25	00	23	25	36	22	
1	1760		00	31	24	29	$\frac{10}{20}$	25	10	23	35	36	32	
Ì	1770		10	31	34	29	30	25	20	23	45	36	42	
ı	1780		20	31	44	29	40	25	30	23	55	37	04	
ı	1790		30	31	54	29	50	25	40	23	65	37	14	
l	1800		08	32	08	30	00	25	50	24	00	37	24	
ł	1810		18	32	18	30	10	25	60	24	10	37	34	
ı	1820		28	32	28	30	20	26	00	24	20	37	44	
	1830		06	32	38	30	30	26	10	24	30	38	06	
THE REAL	1840		16	32	48	30	40	26	20	$\frac{1}{24}$	40	38	16	
	1850		26	33	02	30	50	26	30	24	50	38	26	
-	1860		04	33	12	31	00	26	40	24	60	38	36	
I	1870		14	33	22	31	10	26	50	24	70	38	46	
1	1880		24	33	32	31	20	26	60	25	05	39	08	
1	1890	59 0	02	33	42	31	30	27	00	25	15	39	18	
1	1900		12	33	52	31	40	27	10	25	25	39	28	
1	1910		22	34	06	31	50	27	20	25	35	39	38	
1	1920		00	34	16	32	00	27	30	25	45	40	00	
-	1930		10	34	26	32	10	27	40	25	55	40	10	
I	1940		20	34	36	32	20	27	50	25	65	40	20	
-	1950		30	34	46	32	30	27	60	26	00	40	30	
-	1960		08	35	00	32	40	28	00	26	10	40	40	
I	1970		18	35	10	32	50	28	10	26	20	41	02	
1	1980	61	28	35	20	33	00	28	20	26	30	41	12	
1	1990		06	35	30	33	10	28	30	26	40	41	22	
1	2000	62 1	16	35	40	33	20	28	40	26	50	41	32	

Table Showing the Number of Bushels and odd Pounds in a Load of Grain—Continued.

Weig	Oats.			Ear Corn 70 Lbs.	Ear Corn 75 Lbs.	Barley.
Cot-	Bus. Lbs.	Bus. Lbs.	Bus. Lbs.	Bus. Lbs.	Bus. Lbs.	Bus. ! Lbs.
$\begin{vmatrix} 2010 \\ 2020 \end{vmatrix}$	62 26	35 50 36 04	33 30 33 40	28 50	$\begin{vmatrix} 26 & 60 \\ 26 & 70 \end{vmatrix}$	41 42
$\frac{2020}{2030}$	63 04	0.0		28 60 29 00		42 04
$\begin{array}{c} 2030 \\ 2040 \end{array}$	63 14	36 14 36 24	33 50 34 00	$\begin{vmatrix} 29 & 00 \\ 29 & 10 \end{vmatrix}$	27 05 27 15	42 14
$\frac{2040}{2050}$	63 24 64 02	36 34	34 10	29 20	27 25	42 24 42 34
2060	64 12	36 44	34 20	29 30	27 35	42 44
2070	64 22	36 54	34 30	29 40	27 45	43 06
2080	65 00	37 08	34 40	29 50	27 55	43 16
2090	65 10	37 18	34 50	29 60	27 65	43 26
2100	65 20	37 28	35 00	30 00	28 00	43 36
2110	65 30	37 38	35 10	30 10	28 10	43 46
2120	66 08	37 48	35 20	30 20	28 20	44 08
2130	66 18	38 02	35 30	30 30	28 30	44 18
2140	66 28	38 12	35 40	30 40	28 40	44 28
2150	67 06	38 22	35 50	30 50	28 50,	44 38
2160	67 16	38 32	36 00	30 60	28 60	45 00
2170	67 26	38 42	36 10	31 00	28 70	45 10
2180	68 04	38 52	36 20	31 10	29 05	45 20
2190	68 14	39 06	36 30	31 20	29 15	45 30
2200	68 24	39 16	36 40	31 30	29 25	45 40
2210	69 02	39 26	36 50	31 40	29 35	46 02
2220	69 12	39 36	37 00	31 50	29 45	46 12
2230	69 22	39 46	37 10	31 60	29 55	46 22
2240	70 00	40 00	37 20	32 00	29 65	46 32
2250	70 10	40 10	37 30	32 10	30 00	46 42
2260	70 20	40 20	37 40	32 20	30 10	47 04
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	70 30	40 30 40 40	37 50 38 00	32 30 32 40	30 20 30 30	47 14 47 24
2290	71 08 71 18	40 50	38 00 38 10	32 50	30 40	47 34
2300	71 28	41 04	38 20	32 60	30 50	47 44
2310	72 06	41 14	38 30	33 00	30 60	48 06
2320	72 16	41 24	38 40	33 10	30 70	48 16
2330	72 26	41 34	38 50	33 20	31 05	48 26
2340	73 04	41 44	39 00	33 30	31 15	48 36
2350	73 14	41 54	39 10	33 40	31 25	48 46
2360	73 24	42 08	39 20	33 50	31 35	49 08
2370	74 02	42 18	39 30	33 60	31 45	49 18
2380	74 12	42 28	39 40	34 00	31 55	49 28
2390	74 22	42 38	39 50	34 10	31 65	49 38
2400	75 00	42 48	40 00	34 20	32 00	50 00
2410	75 10	43 02	40 10	34 30	32 10.	50 10
2420	75 20	43 12	40 20	34 40	32 20.	50 20
2430	75 30	43 22	40 30	34 50	32 30,	50 30
2440	76 08	43 32	40 40	34 60	32 40	50 40
2450	76 18	43 42	40 50	35 00	32 50	51 02
2460	76 28	43 52	41 00	35 10	32 60	51 12
2470	77 06	44 06	41 10	35 20	32 70	51 22
$2480 \\ 2490$	77 16	$ \begin{array}{c c c c c c c c c c c c c c c c c c c$	41 20	35 30	33 05;	51 32
	77 26 78 04		41 30 41 40	35 40 35 50	33 15 33 25	51 42 52 04
2500	10 104	44 36	41 40	99 90 1	00 20	00 04

Table Showing the Number of Bushels and odd Pounds in a Load of Grain—Continued.

Weig	Oats.	Corn, Rye		Wheat.		Ear Corn 70 Lhs.			Corn Lbs.	Barley.	
	Bus. 1.bs.	Bus.	Lbs.	Bus.	Lbs.	Bus.	Lbs.	Bus.	Lbs.	Bus.	Lba.
2510	78 14	44	46	41	50	35	60	33	35	52	14
2520	78 24	45	00	42	00	36	00	33	45	52	24
2530	79 02	45	10	42	10	36	10	33	55	52	34
2540	79 12	45	20	42	20	36	20	33	65	52	44
2550	79 22	45	30	42	30	36	30	34	00	53	06
2560	80 00	45	40	42	40	36	40	34	10	53	16
2570	80 10	45	50	42	50	36	50	34	20	53	26
2580	80 20	46	04	43	00	36	60	34	30	53	36
2590	80 30	46	14	43	10	37	00	34	40	53	46
2600	81 08	46	24	43	20	37	10	34	50	54	08
2610	81 18	46	34	43	30	37	20	34	60	54	18
2620	81 28	46	44	43	40	37	30	34	70	54	28
2630	82 06	46	54	43	50	37	40	35	05	54	38
2640	82 16	47	08	44	00	37	50	35	15	55	00
2650	82 26	47	18	44	10	37	60	35	25	55	10
2660	83 04	47	28	44	20	38	00	35	35	55	20
2670	83 14	47	38	44	30	38	10	35	45	55	30
2680	83 24	47	48	44	40	38	20	35 35	55	55	40
2690	84 02	48	02	44	50		30		65	56	02
2700	84 12	48	12	45	00	38	40	36	00	56	12
2710	84 22	48	22	45	10	38	50	36	10	56	22
2720	85 00	48	32	45	20	38	60	36	20	56	32
2730	85 10	48	42	45	30	39	00	36	30	56	42
2740	85 20	48	52	45	40	39	10	36	40	57	04
2750	85 30	49	06	45	50	39	20	36	50	57	14
2760	86 08	49	16	46	00	39	30	36	60	57	24
2770	86 18	49	26	46	10	39	40	36	70	57	34
2780	86 28	49	36	46	$\frac{20}{20}$	39	50	37	05	57	44
2790	87 06	49	46	46	30	39	60	37 37	15	58	06
2800	87 16	50	00	46	40	40	00		25	58	16
2810	87 26	50	10	46	50	40	10	37	35	58	26
2820	88 04	50	20	47	00	40	20	37	45	58	36
2830	88 14	50	30	47	10	40	30	37	55	58	46
2840	88 24	50	40	47	20	40	40	37	65	59	08
2850	89 02	50	50	47	30	40	50	38	00	59 59	18 28
2860	89 12	51	04	47	40	40	60	38	$\begin{vmatrix} 10 \\ 20 \end{vmatrix}$	59	38
2870	89 22	51	14	47	50	41	00	38 38	30	60	00
2880	90 00	51	24	48 48	00	41	$\frac{10}{20}$	38	40	60	10
2890	90:10	51	34		10		30	38	50	60	20
2900	90 20	51	44	48	20	41		38	60	60	30
2910	90 30	51	54	48	30	41	40 50	38	70	60	40
$\begin{vmatrix} 2920 \\ 2930 \end{vmatrix}$	91 08 91 18	52 52	08 18	48 48	40 50	41	60	39	05	61	02
		52	28	49	00	42	00	39	15	61	12
2940	91 28			49	10	42	10	39	25	61	22
2950	92 06	52	38		20	42	20	39	35	61	32
2960	92 16	52 53	48 02	49	30	42	30	39	45	61	42
2970	92 26 93 04	53	12	49	40	42	40	39	55	62	04
2980		53	22	49		42	50	39	65	62	14
2990	93 14 93 24		32		50 00	42	60	40	00	62	24
3000	93 24	53	104	50	UU	4.0	.00.	40	UU	UA	~=

Table Showing the Number of Bushels and odd Pounds in a Load of Grain—Continued.

	3	l Oa	its.	Corn, Rye				Ear			Corn	Barley.	
1 6	1	32	Lbs.	56	Lbs.	_60	Lbs.	30	Lhs.	75	Lbs.	48	libs.
1 5	010	Bus. 94	Lbs.	Bus.	Lbs.	Bus.	Lbs.	Bus.	Lbs.	Bus.	Lbs.	Bus.	Lbs.
			02	53	42	50	10	43	00	40	10	62	34
	020	94	12	53	52	50	20	43	10	40	20	62	44
	030	94	22	54	06	50	30	43	20	40	30	63	06
	040	95	00	54	16	50	40	43	30	40	40	63	16
	050	95	10	54	26	50	50	43	40	40	50	63	26
	060	95	20	54	36	51	00	43	50	40	60	63	36
	070	95	30	54	$ 46^{\circ} $	51	10	43	60	40	70	63	46
	080	96	08	55	00	51	20	44	00	41	05	64	08
3	090	96	18	55	10	51	30	44	10	41	15	64	18
8	100	96	28	55	20	51	40	44	20	41	25	64	28
	110	97	06	55	30	51	50	44	30	41	35	64	38
3	120	97	16	55	40	52	00	44	40	41	45	65	00
	130	97	26	55	50	52	10	44	50	41	55	65	10
3	140	98	04	56	04	52	20	44	60	41	65	65	20
3		98	14	56	14	52	30	45	00	42	00	65	30
13	160	98	24	56	24	52	40	45	10	42	10	65	40
	170	99	02	56	34	52	50	45	20	42	20	66	02
	180	99	12	56	44	53	00	45	30	42	30	66	12
	190	99	22	56	54	53	10	45	40	42	40	66	22
	200	100	00	57	08	53	20	45	50	42	50	66	32
	210	100	10	57	18	53	30	45	60	42	60	66	42
3		100	20	57	28	53	40	46	00	42	70	67	04
11 ~	230	100	30	57	38	53	50	46	10	43	05	67	14
	$\frac{230}{240}$	101	08	57	48	54	00	46	20	43	15	67	24
	250	101	18	58	02	54	10	46	30	43	25	67	34
	$\frac{250}{260}$	101	28		12	54	20	46		43	35	87	44
	$\frac{200}{270}$	102		58		54		46	40	43		68	06
	280		06	58	22		30		50	43	45		
		02	16	58	32	54	40	46	60		55	68	16
	290	102	26	58	42	54	50	47	00	43	65	68	26
	300	103	04	58	52	55	00	47	10	44	00	68	36
	310	103	14	59	06	55	10	47	20	44	10	68	46
	320	103	24	59	16	55	20	47	30	44	20	69	08
	330	104	02	59	26	55	30	47	40	44	30	69	18
	340	104	12	59	36	55	40	47	50	44	40	69	28
	350	104	22	59	46	55	50	47	60	44	50	69	38
	360	105	00	60	00	56	00	48	00	44	60	70	00
	370	105	10	60	10	56	10	48	10	44	70	70	10
	380	105	20	60	20	56	20	48	20	45	05	70	20
	390	105	30	60	30	56	30	48	30	45	15	70	30
	400	106	08	60	40	56	40	48	40	45	25	70	40
	410	106	18	60	50	56	50	48	50	45	35	71	02
	420	106	28	61	04	57	00	48	60	45	45	71	12
	430	107	06	61	14	57	10	49	00	45	55	71	22
3	440	107	16	61	24	57	20	49	10	45	65	71	32
3	450	107	26	61	34	57	30	49	20	46	00	71	42
13	460	108	04	61	44	57	40	49	30	46	10	72	04
	470	108	14	61	54	57	50	49	40	46	20	72	14
	480	108	24	62	08	58	00	49	50	46	30	72	24
	490	109	02	62	18	58	10	49	60	46	40	72	34
11 =	500	109	12	62	28	58	20	50	00	46	50	72	44

FARMER'S CLUB

In a farmer's club, which has for its object social intercourse and the acquisition of knowledge, there need be few arbitrary rules of order enforced, but, instead, the discussions may be more or less conversational. But, as all business is facilitated by good regulations, the officers of the club ought to be armed with by-laws, and empowered to enforce their provisions whenever necessary.

Constitution

ART. 1.—This association shall be known as the Castana Farmer's Club. Its object shall be to promote a knowledge of practical Farming and Gardening among its members and the community, in connection with social enjoyments by the members and their families.

ART. 2.—The members of the club are those who frame this constitution and conform to its requirements, and others who may be invited to join by the executive committee, all of whom shall pay \$00—annually in September

(or monthly) into the treasury.

ART. 3.—The officers of the Club shall be a President, a Secretary, who shall be the Treasurer, and three members, who, with the President and Secretary, shall constitute the Executive Committee. The Secretary shall keep records of transactions, and be custodian of the funds and other property of the Club, being accountable at all times to the Executive Committee, giving bonds, if required, and shall prepare and present a full report to the Club at the annual meeting. The Executive Committee, three members of which shall be a quorum, shall have general charge of the interests of the Club and the carrying out of its objects. It shall fill vacancies among its officers, make rules, invite new members to join, regulate expenditures, manage exhibitions or fairs, publish offers of prizes and the awards, be responsible for the welfare of the Club, and report at the annual meeting through its Clerk.

ART. 4.—The meeting of the Club shall take place on the first Tuesday of each month; the meeting in January being known as the "Annual Meeting."

ART. 5.—This Constitution may be amended by a vote of two-thirds of the members present at any regular meeting, notice having been given at the preceding regular meeting.



FACTS AND FIGURES FOR BUSINESS MEN

HOW TO BECOME WEALTHY

The way to wealth, says Franklin, is as plain as the way to market. It depends chiefly on two words—industry and frugality.

It is not what a man earns, but what he saves that makes him rich.

From the following table it appears that if a person saves $2\frac{3}{4}$ cents per day from the time he is twenty-one till he is seventy, the total, with compound interest, will amount to \$2,900, and a daily saving of $27\frac{1}{2}$ cents reaches the important sum of \$29,000. Save all you can in a prudent and systematic manner for a time of possible want, but act justly by paying your debts, and liberally by assisting those in need, and helping in a good cause.

A Table of Daily Savings at Compound Interest

Cents per Day.	Per Year.	In Ten Years.	Fifty Years.
		\$ 130	
51			
11	40	520	11,600
$27\frac{1}{2}$	100	1,300	29,000
55	200	2,600	58,000
1.10	400	5.200	116,000
1.37	500	6,500	145,000

BIG SALARIES PAID TO BUSINESS MEN

Ten railroad presidents in the United States draw salaries aggregating \$485,000 per annum, an average of \$48,500 for each individual. Few of these men are capitalists, but each one wields a laboring oar in railway management and takes great responsibilities off the shoulders of the capitalists who employ him. The list is as follows:

A. J. Cassatt, Pennsylvania railroad\$75,000
George F. Baer, Reading company
L. F. Loree, Rock Island 50,000
James J. Hill, Great Northern
William H. Newman, New York Central system 50,000
Samuel Spencer, Southern railway 50,000
F. D. Underwood, Erie system
E. B. Thomas, Lehigh Valley
Marvin Hughitt, Chicago & Northwestern
E. P. Ripley, Atchison system
m . 1
Total\$485,000

In most cases these large salaries include compensation for services rendered as the executive head of several different companies, all, however, belonging to one system.

TEACH BUSINESS WAYS TO WIVES AND DAUGHTERS

Every business man who has a wife and daughters should instruct them in the essential principles of business, so that if illness should prevent him for a time from giving active attention to his affairs, they may convey to him accurate knowledge



TEACHING CHILDREN BUSINESS

of the condition of his business, or, in case of his death, may aid in the proper settlement of his estate.

Wives and daughters of business men should seek to acquaint themselves with the laws and conduct of actual business, and become familiar with the forms used in the transaction of commercial affairs. Even if they are not called upon to take actual charge of business matters, still this knowledge will be of service, as it will enable them to give valuable aid and helpful counsel to husband or father.

And let no man think lightly of the opinion of his wife in times of difficulty. Women generally have more acuteness of perception than men; and in moments of peril, or in circumstances that involve a crisis or turning-point in life, they have usually more resolution and greater instinctive judgment.

HOW TO TEACH BUSINESS TO CHILDREN

Children will learn with pleasure from the lips of parents what they think drudgery to learn from books. This fact should be taken early advantage of to familiarize sons and daughters with business customs, and to induce them to form business habits.

Let them learn from experience how money is earned by industry and saved by economy.

That they may form a habit of doing business systematically, procure for them a little account book, and have them keep an itemized account of all money received and paid out. This should show how each sum entered was earned, and how each sum paid out was expended. This habit, once acquired, will become a second nature and remain with them for life.

System is absolutely essential to business success, and parents should see to it that their children do things systematically. "Successful men," says Carlyle, "possess the great gift of a methodical, well-balanced, arranging mind; they are men who cannot work in disorder, but will have things straight, and know all the details, which enables them so to arrange the machinery of their affairs, that they are fully cognizant alike of its strength, weakness, and capacity, and they judiciously and discreetly exercise all its power to the uttermost."

WHEN NAME SHOULD BE SIGNED IN FULL

Persons should always sign their full name to deeds, mortgages, notes, and receipts; for, although one Christian name only is recognized in law, yet the writing out in full of one's "middle" name, as well as the first name, tends to prevent the

name being mistaken for that of some other individual having similar initials. For instance, instead of John A. Jones, write John Albert Jones.

HOW A MARRIED WOMAN SHOULD SIGN HER NAME

A married woman should sign her own Christian name, instead of that of her husband, to legal and business documents. For example, Mrs. Smith should sign Mary Ellen Smith, instead of Mrs. John Smith.

HOW SIGNATURE OF PERSON WHO CANNOT WRITE SHOULD BE SIGNED

When a person who cannot write is required to sign a document, it should be done by having him make his mark. The signature should always be witnessed. Example:

 $\begin{array}{c} \text{his} \\ \text{Henry} \times \text{Yates.} \\ \\ \text{mark} \end{array}$

Witness: William Henson.



PENSIONS 289



WILLIAM MCKINLEY

PENSIONS

The Pension Bureau is the largest bureau of the government. It is presided over by the Commissioner of Pensions, who attends to all matters concerning pensions, and law affecting them; to their payment, and the detection and prosecution of attempts at fraud in claims for pensions.

Pension Agents are appointed by the President for four years, and give bonds and security for the faithful performance of their duties.

Rates Paid.—The highest rate of pension allowed by law is \$100 a month, this being for the loss of both arms; the next highest is \$72 per month, being for loss of both feet, or total disability requiring the regular aid and attendance of another person. These disabilities are called specific disabilities. The rates fixed by law for total disabilities, not specific, are as fol lows: Army.—Lieutenant-colonel and all officers of higher rank, \$30; major, surgeon, and paymaster, \$25; captain and chaplain, \$20; first lieutenant and assistant surgeon, \$17; second lieutenant and enrolling officer, \$15; enlisted men, \$8. Navy — Captain and all officers of higher rank, commander, surgeon, paymaster, and chief engineer, \$30; lieutenant, passed assistant

surgeon, surgeon, paymaster, and chief engineer, \$25; master, professor of mathematics, and assistant surgeon, \$20; first assistant engineer, ensign, and pilot, \$15; cadet midshipman, passed midshipman, midshipman, warrant officers, \$10; enlisted men, \$8.

How to Obtain a Pension.—To obtain a pension the applicant must file a claim with the Commissioner of Pensions, Washington, D. C. In a claim by the soldier he should set forth all his military or naval service, giving dates of enlistment and discharge. He should also set forth the name or nature of all disabilities for which pension is claimed, giving the time when, the place where and the circumstances under which each was contracted. The prime requirement to establish a claim under the act of July 14, 1862, usually termed the general law, is to show that the disability for which pension is claimed had its origin while in the service and line of duty; that it has existed as a disabling cause from date of discharge, and now exists in a degree pensionable under the law. In a claim under the act of June 27, 1890, the essential rquirements are: A service of ninety days or more, an honorable discharge therefrom and proof that the disability for which pension is claimed is not due to claimant's own vicious habits, but it need not necessarily be of service origin.

Widow's Claim.—In a widow's claim it is necessary to show her legal marriage to the soldier, the date of his death, and, under the general law, that it was due to some cause of service origin. She must also show that she has remained his widow. If there are children of the soldier under sixteen years of age at the date of his death, their names should be given and the date of birth of each clearly shown. If any have died, the date should be proved. In a widow's claim under the act of June 27, 1890, the requirement as to service is the same as under an invalid claim, and in addition thereto she must show a legal marriage to the soldier prior to the passage of the act, the fact of soldier's death (but it need not be shown to be due to service), her continued widowhood and that she is without other means of support than her daily labor. A minor child's title to pension accrues only on the death or remarriage of the widow, which fact must be shown, in addition to the requirements in widow's claim.

Dependent Mother.—A dependent mother must show her relationship to the soldier, his celibacy, that he contributed to

her support, that his death was due to some cause of service origin, the date of his death, and, under the general law, that she was dependent upon him at the date of his death. Under the act of June 27, 1890, it is only necessary to show dependence at date of filing claim and since then. A dependent father must show relationship by legal marriage to soldier's mother, the date of soldier's birth and of the mother's death, in addition to the requirements in the mother's claim.

ANARCHISTS NOT ELIGIBLE TO CITIZENSHIP

EXCLUDING ANARCHISTS.—The act of March 3, 1903 (taking effect June 1, 1903), imposed these further restrictions on the naturalization of aliens: No person who disbelieves in or who is opposed to all organized government, or who is a member of or affiliated with any organization entertaining and teaching such disbelief in or opposition to all organized government, or who advocates or teaches the duty, necessity, or propriety of the unlawful assaulting or killing of any officer or officers, either of specific individuals or of officers generally, of the government of the United States or of any other organized government, because of his or their official character, or who has violated any of the provisions of this act, shall be naturalized or be made a citizen of the United States.

DUTY OF COURTS.—All courts and tribunals and all judges and officers thereof having jurisdiction of naturalization proceedings or duties to perform in regard thereto shall, on the final application for naturalization, make careful inquiry into such matters, and before issuing the final order or certificate of naturalization cause to be entered of record the affidavit of the applicant and of his witnesses so far as applicable, reciting and reaffirming the truth of every material fact requisite for naturalization. All final orders and certificates of naturalization hereafter made shall show on their face specifically that said affidavits were duly made and recorded, and all orders and certificates that fail to show such facts shall be null and void.

Penalty for Violation.—Any person who purposely procures naturalization in violation of the provisions of this section shall be fined not more than five thousand dollars, or shall be imprisoned not less than one nor more than ten years, or both, and the court in which such conviction is had shall thereupon adjudge and declare the order or decree and all certificates admitting such person to citizenship null and void. Jurisdiction is hereby conferred on the courts having jurisdiction of the trial of such offense to make such adjudication.

Any person who knowingly aids, advises or encourages any such person to apply for or to secure naturalization or to file the preliminary papers declaring an intent to become a citizen of the United States, or who in any naturalization proceeding knowingly procures or gives false testimony as to any material fact, or who knowingly makes an affidavit false as to any material fact required to be proved in such proceeding, shall be fined not more than five thousand dollars, or imprisoned not less than one nor more than ten years, or both.

Number of Pensioners on the Roll June 30, 1903

and the second s	-									-	
		GEI	GENERAL LAW	W.		Ac	T OF JUN	ACT OF JUNE 27, 1890.	0.	Number	Number
LOCATION OF		Army.		Navy.	у.	Arı	Army.	Na	Navy.	sioners	sioners
AGENCI.	Invalids	Nurses	Widows, etc.	Invalids	Widows,	Invalids	Widows, etc.	Invalids	Widows, etc.	June 30, 1903.	June 30, 1902.
Topeka	27,395	99	6,691	:	:	60,850	17,397	:	:	145,629	115,855
Chicago	20,600	57	6,786	869	349	31,040	10,510	3,704	1,007	76,947	77,203
Indianapolis	28,974	43	7,925	:	:	18,855	7,534	:	:	64,767	66,155
Knoxville	9,174	25 K	3,513	5550	39.4	30,107	10,693	2,008	1 146	62,880	63,748
Boston	11,611	47	6,055	985	548	21,029	11,824	3,300	1,681	58,044	57,626
Des Moines	17,909	200	4,048	.000	.0	25,258	6,501		.1	54,880	55,037
Washington	10,849	200	3,709	814	545	29,505	7,975	3,047	1,750	53,758	53,450
Milwaukee	16,170	27	4,244		:	22,907	6.349		00767	50,675	50,808
Buffalo	14,753	21	6,085	:	:	19,466	7,256	:	:	48,239	47,242
Pittsburg	10,410	14	3,747	:	:	24,076	9,065	:	:	47,893	48,071
Detroit	15,793	1.5	4,346			17,033	5,291	.0	.0	43,331	43,820
Sall Francisco	6,719	54	1,567	241	40	19,000	4,330	1,000	200	38,051	36,735
Anonsta	7,000	υπ	0,77	:	:	6,305	9,191	:	:	10,000	10,000
Concord	7,062		2,543	: :	: :	5,519	2,208	: :	: :	17,574	17,807
Total	264,139	624	86,871	4,142	2,221	427,711	155,249	16,010	6,992	996,545	999,446
Inc. during year			:	:	:	1,523	7.048	57	15	:	:
Dec.during year	13,826	10	183	218	42	:	:	:	:	2,901	:

Pensioners of the war of the Revolution-Widows, 2; daughters, 3. Pensioners of the war of 1812-Survivor. 1; widows, 1,115. Pensioners of the war with Mexico—Survivors, 5,964; widows, 7,910. Indian wars—Survivors, 1,565; widows, War with Spain-Invalids, 9,200; widows, 3,662. 3,169.



BUILDING AND LOAN ASSOCIATIONS

These associations, usually incorporated, are established for the purpose of loaning money to their members upon real estate security. They make it their object to enable persons having a lot to borrow money thereon for the purpose of erecting a dwelling, allowing them to repay the money in installments amounting to little more than ordinary monthly rent. When the full amount is paid up the borrower becomes owner of the property.

Interest.—In considering the question of usury in a loan from a building association, payments made by the borrower as dues are not to be considered as interest, as such payments are made in order to acquire an interest in the property of the association and not for the use of money.

Fines imposed for default in payment of dues and interest cannot be collected by foreclosure of a mortgage given to secure payment of an amount borrowed, unless this has been provided for by special agreement.

Liability of Stockholders.—A stockholder who actively or passively concurs in the management of the affairs of the association must bear his share of the losses during his membership resulting from such management.

PRACTICAL LAW AND BUSI-NESS POINTERS

An Attorney's Powers.—An attorney-at-law has no implied authority to compound or give up any rights of his clients, or to consent to a judgment against his client.

Bank Checks.—The acceptance of a bank check by a creditor is not an absolute but a conditional payment of the drawer's debt.

A drawer of a bank check cannot countermand it so as to affect it in the hands of a holder in good faith.

Waiver of Homestead and Personal Property Exemption.—A waiver of a debtor's right to claim personal property as exempt from execution, when attempted to be made by an executory contract, is ineffectual and will not be enforced.

A clause in a promissory note expressly waiving the benefit of all laws exempting real or personal property from levy and sale, being contrary to public policy, is inoperative, and confers no right to levy upon and sell personal property which is exempt.

Distress for Rent.—The right of a landlord to issue a warrant authorizing a levy upon property of a tenant for the satisfaction of rent is looked upon in this country with disfavor, and in some of the States the right has been abolished.

When property temporarily in the possession of a tenant, but belonging to another, is taken under a distress against the tenant, the landlord will be liable to the owner for its value.

Wrongful Levy of Execution.—For wrongful levy on property, when an officer, under an execution, seizes the goods of some other person than the defendant in the execution, the owner may maintain an action, and trespass is the usual remedy of

the owner; but trover may be maintained in many cases and in some cases replevin will lie. The owner is not bound to resort to a trial of the right of property.

HUSBAND AND WIFE

Liability of Husband for Goods Sold to Wife.—When goods necessary and suitable to the position in life of a wife are sold to her, the jury will be justified in finding a verdict against the husband, as she acted as agent of the husband in contracting the debt.

Wife Living Apart from her Husband.—A husband is not liable for necessaries furnished his wife when she lives separate from him without his fault.

Separate Maintenance.—Where the wife leaves her husband without sufficient cause, she will not be entitled to a decree for a separate maintenance.

When she leaves him with his consent and on account of his ill treatment, he is liable for the expense of a separate maintenance.

FENCE LAWS

Fences are mostly regulated by statutes of the State where located. There are certain laws, however, that are applicable to them generally.

Legal Fence.—The laws of the several States provide what shall constitute a legal fence, which generally must be four feet high, with sufficient boards or wire, or both, to turn cattle.

Damages.—As a general rule all premises must be properly inclosed before damages can be recovered from the owner of trespassing stock for injury thereto.

Partition, or Division Fences.—The owners of adjacent tracts of land, in most of the States, are bound to erect and maintain one-half of a suitable fence along the line separating such tracts.

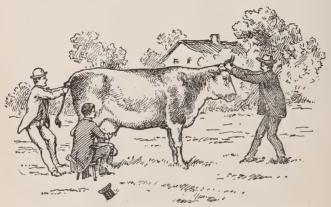
Repairs.—Each party is bound to look after his own part of the fence and keep it in good repair, and he must restrain his own stock from trespassing upon the lands of his neighbor.

Fence-Viewers, in some of the States, are provided for by statute to determine the just share of each party liable to maintain a partition fence, and suitable methods are provided for enforcing their awards.

Railroads are required by statute in many States to fence their tracts, and a failure to do so renders them liable for stock killed by reason of non-compliance with the statute.

Barb-wire fences must be so used and cared for as not to endanger persons and property, and the use of such fences imposes upon those who use them care reasonably proportionate to their danger.

Railroads using barb-wire fences must use due diligence in running their trains, not only to avoid killing stock, but to avoid precipitating them by fright against a fence to be mangled or bruised.



THEY WENT TO LAW ABOUT THE LINE FENCE-THE SUIT BEGINS

TRESPASSING AND MISCHIEVOUS ANIMALS

Owners of domestic animals, such as cows, horses, sheep, hogs, poultry and dogs, must not permit them to stray upon the premises of others, or they will be liable in trespass for damages.

No Right to Kill or Injure.—But those upon whose premises such animals trespass are not justified in killing or injuring the animals, no matter how aggravating or repeated the acts of trespass may be.

Remedy Provided.—The persons injured by such trespassing have their remedy in an action at law for damages, and there

are statutes providing for the taking up of such animals and holding them at the expense of their owner or impounding them as estrays.

Mischievous Animals.—The owner of a mischievous animal, known to him to be so, is responsible, when he permits him to go at large, for the damages he may do. And any one may justify the killing of a ferocious animal at large. The owner of such an animal may be indicted for a common nuisance.



THE SUIT ENDS AND THE LAWYER GETS BOTH COW AND MILK

If a person enters the barn or pasture of another, and is injured by a vicious horse or bull, it must be shown that the owner used all reasonable means in the care of his animals for the safety of his help and neighbors.

If a person enters upon the land of another, and is injured, he must show good cause for entering upon said land, and also prove ordinary caution, in going where cattle and horses were kept.

RESPONSIBILITY OF OWNING A DOG

A person has a right to keep a dog to guard his premises, but not to put him unconfined at the entrance of his house; because a person coming there on a social or business errand may be injured by him. But if the dog is chained, and a visitor so incautiously goes near him that he is bitten, he has no right of action against the owner.

Liable for Damage.—Owners of dogs must keep them from straying upon the public highway, or they will be responsible for any damage caused by their annoyance of travelers, scaring of children, barking after teams, etc.

If a dog strays upon the premises and kills or injures any other domestic animal, its owner is liable for damages.



Dangerous Dogs running at large may lawfully be killed when their ferocity is known to their owner, or in self-defense; and when bitten by a rabid animal a dog may be lawfully killed by any one.

But a person is not justified in killing a dog without notice to the owner, merely because it barks around his house at night.

The owner of a vicious dog will not be held liable for the dog's biting a person unless it can be shown that the dog had previously exhibited a propensity to violence, and that the owner was acquainted with this propensity.

BREACH OF TRUST

Breach of trust is the willful misappropriation of personal property by one who has been intrusted with its possession in confidence.

As Distinguished from Larceny.—The cases where personal property is taken by a person to whom it has been intrusted, and who converts it to his own use, present very nice discriminations of mere breaches of trust from larceny.

If a person has property in goods, and a right to the possession of them, he cannot, in general, commit the crime of larceny in taking them; but if he only has the custody of them, and no property in them, he may steal them.

The courts generally lean toward construing the offense to be larceny, and not merely a breach of trust, where the party gains possession by some false pretense, with the original intent to steal.

A bailee who fraudulently converts the property intrusted to him to his own use is guilty not simply of a breach of trust, which is only a trespass, but of larceny, which is a crime.

LEGAL GIFTS

Definition.—A gift is the voluntary and gratuitous transfer or conveyance of the right and possession of property by one person to another.

Names of Parties.—The giver of the property is called the donor, the receiver the donee.

Who May Make a Gift.—Any person competent to transact ordinary business may give whatever he owns to any other person.

Delivery to the donee is essential to a gift, and there must also be actual acceptance. It must be an actual delivery, so far as the subject is capable of delivery. If the thing be not capable of actual delivery, there must be some act equivalent to it; something sufficient to work an immediate change in the control of the property.

Looked Upon with Suspicion.—The law generally looks with some degree of suspicion upon gifts, and they are usually considered to be fraudulent if creditors or others become sufferers thereby.

Retracting.—Where a gift has been executed by delivery of possession, it is not in the donor's power to retract it; but so long as the gift has not been completed by delivery of possession, it is not properly a gift, but a contract, and this a person cannot be compelled to perform but upon good and sufficient consideration.

A Gift Made in Prospect of Death may be revoked by the donor at any time during his life, though it be completed and executed by delivery and acceptance.

A Gift may be Annulled by the creditors of the donor, if he was insolvent at the time of the gift and it diminished the creditor's fund.

FINDER OF LOST PROPERTY

The general law on this subject is, that the finder of money or goods, if he takes possession of the property, is to use all due means to discover the rightful owner; and if he appropriates the articles to his own use, knowing the rightful owner, or without having made due exertion to find him, he is held guilty of larceny. Failing to find the rightful owner, after taking due means to do so, the finder of the lost articles is entitled to regard them as his own property.

RULES GOVERNING THE FINDING OF LOST PROPERTY

1. The finder of lost property is the owner of it against all the world but the original owner. Thus, it is held that a stranger who finds lost money in a shop may retain it as against the shop owner.

Money Left on a Desk in a bank, provided for the use of its depositors, is not lost so as to entitle the finder to the same, as against the bank.

An Aerolite which buries itself in the ground is regarded as an accretion to the land, and belongs to the owner of the soil on which it falls.

- 2. The finder is always at liberty to leave untouched what he finds, and cannot be made accountable for any injury thereafter happening to it.
- 3. The finder may demand from the owner all his expenses necessarily incurred in keeping and preserving the property, and probably advertising and like charges for the owner's benefit.
- 4. If a reward be offered, specific and certain or capable of being made so by reference to a standard, the finder complying with the terms of the advertisement becomes entitled to such reward, and may sue for it.
- 5. If the finder of lost goods, or goods which are reasonably supposed by him to have been lost, appropriates them to his own use, really believing when he takes them that the owner cannot

be found, it is not larceny; but if he takes them reasonably believing that the owner can be found and thus appropriates them it is larceny.

THE LAW OF SUBSCRIPTIONS

Subscription is the placing of a signature under a written or printed agreement. By such an act a person contracts, in writing, to pay a sum of money for a specific purpose; as a subscription to a charitable institution, a subscription for a book, etc.

Subscription Papers.—"The law on the subject of these subscription papers," says Parsons, "and of all voluntary promises of contribution, is substantially this: No such promises are binding unless something is paid for them, or unless some party for whose benefit they are made (and this party may be one or more of the subscribers), at the request, express or implied, of the promisor, and on the faith of the subscription, incurs actual expense or loss, or enters into valid contracts with other parties which will occasion expense or loss. As the objection to these promises, or the doubt about them, comes from the want of consideration, it may be removed by a seal to each name, or by one seal which is declared in the instrument to be the seal of each."

Book Subscriptions.—A person subscribing for a book is bound to take it when delivered by the agent, provided it corresponds with the sample copy shown him when the subscription was given. The agent or publisher may recover at law the price of the book should the subscriber refuse to take it when presented to him.

Newspapers and Other Periodicals.—There is no postal law regulating the transactions between publishers and subscribers. The ordinary rules of contract govern all relations between the parties concerned, and the postoffice has no part except to deliver the article, or return it when ordered to do so.

If the publisher of any paper or periodical sends his paper or magazine, the postmaster must deliver it, if the person to whom it is sent will take it. If he will not take it, the postmaster must notify the publisher.

If a person subscribes for a periodical for a given period, say one year, and the publisher sends it accordingly, the subscriber cannot terminate the contract by stopping his paper at any time during the year. But at the end of the year the subscriber may stop his paper even without paying the subscription due. He is under no legal obligation to take the paper another year. The fact that he has not paid for the expired year's subscription does not bind him to continue taking the paper. He can stop taking it at the end of the year and the publisher can sue for and collect his year's subscription only.

If at the end of the year the publisher continues to send his paper and the subscriber to receive it, the sending is the offer of another year's subscription at the same price, and the receiving of the paper is an acceptance. The implied contract from such action is a renewal of the subscription; and the publisher can send the paper for the renewed term of one year and collect the subscription price for that year as well as the preceding.

If the publisher advertises terms of subscription, all parties taking the paper under these conditions will be held according to the conditions.

WORKING ON SUNDAYS AND LEGAL HOLIDAYS

Sundays.—No one is bound to work on Sunday in performance of his contract, unless the work by its very nature or by express agreement is to be done on that day and can be then done without a breach of law.

Holidays.—There are no laws which forbid or compel a laborer to work on holidays. A laborer must either work on such days or forfeit his wages. In most parts of our country people do not work on Christmas, New Year's, Fourth of July, and, in the East, on Thanksgiving Day, and, in the North, on Decoration Day, yet most employers pay their employees their usual wages. Where this custom is common and well known it may so govern that wages can be collected, though the work is not done.





Give me a place on which to stand and with my lever I will move the world.—Archimedes.

WHEN A TRADE'S A TRADE

1. The Offer.—An offer, or proposal to do a thing, may be made either by words or signs, either orally or in writing, but in law it is not regarded as an offer until it comes to the knowledge of the person to whom it is made.

Offer by Mail.—In commercial transactions when an offer is made by mail, the general rule is that the offerer is entitled to an answer by return mail; but this will not apply in all cases, for example, where there are several mails each day. In transactions which are not commercial, much less promptitude in answering is required.

When Revokable.—An offer which contains no stipulation as to how long it shall continue is revokable at any time. When an offer is made for a time limited in the offer, no acceptance afterwards will make it binding.

2. The Acceptance.—An offer can only be accepted in the terms in which it is made; an acceptance, therefore, which modifies the offer in any particular goes for nothing.

When the Trade's Complete —The rule that a contract is complete at the instant when the minds of the parties meet is subject to modification where the negotiation is carried on by letter, for here it is impossible that both parties should have knowledge of the moment it becomes complete.

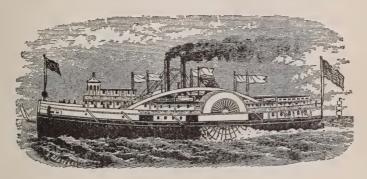
Where an Offer is Made by Letter, the *mailing* of a letter containing an acceptance of the offer completes the contract, although the letter containing the acceptance may be delayed or may not be received through fault of the mail.

Offers of Reward for the return of lost property, or for information leading to the arrest and conviction of offenders, become obligatory as soon as any one inspired to action by the offer complies with its terms. Where the offer is for information, the whole of which is furnished in fragments by different persons, the reward may be equitably proportioned; and so as to the recovery of property.

NAVIGATION LAWS

No vessel is deemed American and entitled to the protection of the American flag unless she is wholly built in this country and wholly owned and officered by Americans. Foreign vessels cannot engage in our coasting trade, which is held to include voyages from Atlantic to Pacific ports. American vessels cease to be such if even a part owner (except in a few instances) resides abroad for a short time. An American vessel once transferred by any process to foreigners, can never sail under our flag again. Duty must be paid on the value of all repairs which an American vessel makes in foreign ports on her return to this country. Restrictions are placed on the repairing of foreign vessels in our ports with imported materials. Vessels

engaged in trade to ports not in North or Central America, and a few specified adjacent places (except fishing and pleasure vessels), pay a tax on entry of six cents per ton of their burden, but the maximum aggregate tax in any one year does not exceed thirty cents. This is called a tonnage tax. Foreign vessels pay



the same tax, but an American vessel is forced to pay an additional tax of fifty cents per ton if one of her officers is an alien. Materials for the construction of vessels for foreign trade may be imported free of duty, but the duty must be paid if the vessel engages for more than two months a year in the coasting trade.

POINTS ON CRIMINAL LAW

Ignorance No Excuse.—Every person is presumed to know what the law is, and ignorance is no excuse for crime.

Arrests.—No one can be legally arrested without a warrant unless the person making the arrest has personal knowledge that the one he arrests has committed a crime. Any one without a warrant may arrest a person committing a felony in his presence, and any peace officer may arrest a person while committing a breach of the peace or immediately afterwards.

The rule, "Every man's house is his castle," does not hold good in criminal cases, and an officer may break open doors of the criminal's house to execute a warrant; and he may do so without a warrant, as also may a private person, in fresh pursuit, under circumstances which authorize him to make an arrest.

Warrants.—No warrant shall be issued but upon probable cause, supported by oath, or affirmation.

Innocence Presumed.—Every one is presumed to be innocent until the contrary is proved.

Bound to Aid the Sheriff.—Every man is bound to obey the call of a sheriff for assistance in making an arrest.

An Accident is not a crime, unless criminal carelessness can be shown.



"THE WAY OF THE TRANSGRESSOR IS HARD"

Arson is the malicious burning of another's house. In some States by statute it is an indictable offense to burn one's own house to defraud insurers.

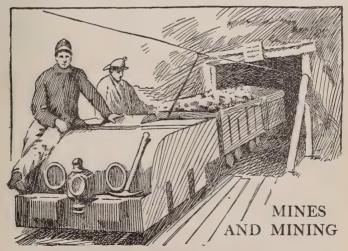
"Settling" an Offense.—It is an indictable offense for the party immediately aggrieved to agree with a thief or other felon that he will not prosecute him, on condition that he return the stolen goods, or to take a reward not to prosecute. Embezzlement is the wrongful appropriation of the money or goods of another by one entrusted therewith. It was not indictable at common law, but has been made a felony by various statutes. Public officers, bank cashiers, clerks, and others acting in a fiduciary capacity are peculiary liable to be charged with this offense.

Drunkenness is not a legal excuse for crime, but sometimes is evidence of the absence of malice.

Self-Accusation.—No one ought to accuse himself except before God.

A Married Woman who commits a crime in the presence of her husband, unless it is of a very aggravated character, is presumed to act by his coercion, and, unless the contrary is proved, she is not responsible. Under other circumstances she is liable, criminally, as if she were a single woman.

Insane Persons and others who are incapable of judging between right and wrong are usually absolved from criminal responsibility, though they may be liable civilly for damage done by their wrongful acts.



Laws Governing.—The laws governing mines and mining vary in the different States, and a person intending to engage in the mining business should consult the statutes of the particular State in which he desires to operate.

HOW TO LOCATE A MINE

Who May Locate.—All valuable mineral deposits in lands belonging to the United States, whether surveyed or unsurveyed, are "free and open to exploration and purchase by citizens of the United States, or those who have declared their intention to become such."

Requisites of Location.—To stake off a claim so as to entitle a prospector to a patent requires considerable care. Unless the boundaries are given correctly, and the claim located strictly in accordance with the statutory provisions, the application for a patent will be refused.

For existing regulations governing the acquisition of mineral lands, the title to which is in the government, see Revised Statutes of the United States, Sections 2318-2352, and Supplement of Revised Statutes, pp. 166-67; 276, 324, 948, 950. An examination of these regulations is absolutely essential to the successful location of a claim, for it is not priority of discovery, but priority of compliance with the various requirements of the statutes that gives the right to the mine. As laws and regulations for the location, development and working of mines may be made by the different States, as well as by the general government, the statutes of the particular State where the mine is to be located should also be consulted.

LAWS GOVERNING PUBLIC ROADS

GENERAL PRINCIPLES

- 1. To prevent collisions, and to secure the safety and convenience of travelers meeting and passing each other upon the highway, a code of rules has been adopted which constitutes what is called the law of the road. These rules, originally established by custom, have, in many instances, been reënacted and declared by statute, and are of general and uniform observance in all parts of the United States. In general, they apply to private ways, as well as public roads, and, indeed, extend to all places appropriated, either by law or in fact, for the purposes of travel.
- 2. Public Roads are those which are laid out and supported by officers entrusted with that power. Their care and control is regulated by the statutes of the different States, and in detail will

not be referred to here, as they can be easily looked up by those who desire information so entirely local.

- 3. Ownership.—The soil and the land remain in the owner, who may put the land to any use, and derive from it any profit, not inconsistent with the rights of the public. If the road is at any time discontinued, the land reverts back to the owner.
- 4. Liability.—The repair of highways is usually imposed upon towns, and they are made liable by statute for all damages against persons or estates, from injuries received or happening in consequence of a neglect of duty on the part of the officers having the same in charge.
- 5. The Primary law of the road is that all persons using the same must exercise due care to prevent collisions and accidents. No one can claim damages for an injury mainly caused by his own negligence.
- 6. **Persons** traveling with carriages or vehicles of transportation, meeting on any public way, are required to turn their carriages or wagons to the right of the center of the road, so far as to permit such carriages or wagons to pass without interruption. Any unreasonable occupation of the public way, whether arising out of a refusal to turn out and allow a more rapid vehicle to pass, or from an unjustifiable occupancy of such a part of the road as to prevent others from passing, will render the party so trespassing liable for damages to any suffering injuries therefrom. A loaded vehicle must turn out, and allow those to pass who may reasonably and lawfully travel faster.
- 7. Riders are not governed by any fixed rules, but are required to use reasonable prudence at all times to prevent accidents. They need less room and can make quicker movements, and are, therefore, not under as well defined rules as vehicles.
- 8. **Pedestrians** have a right to use the carriage-way as well as the sidewalk, and drivers must exercise reasonable care to avoid injuring them, but a foot passenger in crossing the street of a city has no prior right of way over a passing vehicle; both are bound to act with prudence to avoid an accident, and it is as much the duty of the pedestrian to look out for passing vehicles as it is for the driver to see that he does not run over any one; nor does the rule requiring vehicles to keep to the right apply to carriages and foot passengers, for, as regards a foot passenger, a carriage may go on either side.

9. Runaways.—The owner of a runaway horse or horses, if negligent, or not exercising due care, is responsible for all damages that may occur. If a horse naturally quiet to ride and drive is frightened by a railroad train, steam thrasher or other causes not under the control of the rider or driver, and does any damage, or injures any person or persons, the owner is not responsible. If horses are known to be vicious, or sustain a runaway reputation, break loose or run away with their driver, or injure any person or persons, the owner is responsible, unless it can be shown that the horses were frightened by some obstacle which would naturally frighten a gentle or ordinarily quiet horse.

PETITION FOR LAYING OUT A ROAD

To the Commissioners of the Town of Plainfield, County of Will, State of Illinois.

Your petitioners, of the town of Plainfield, would respectfully represent that the public convenience and wants require that a road and highway should be laid out and constructed beginning at the northeast corner of George E. Smith's farm, in the town of Plainfield, and leading in a direct line south to the town of Lockport.

Your petitioners would therefore ask that your honors would view the premises and locate and construct said road and highway, according to the laws in such cases made and provided, as shown by the statutes of the State.

Signatures.

Signatures.

PETITION FOR CHANGING A ROAD

To the Commissioners for the County of

The undersigned respectfully represent that the public road and highway from the house of J. H. Nolan, in the town of Oswego, passing the house of G. H. Faust, to the house of Charles Peterson, in the town of Oswego, is indirect, inconvenient and out of the way; wherefore, your petitioners request your honorable body to view the premises, straighten or new locate such road, and discontinue such parts of the present highway as may be useless, or make such alterations or improvements as shall appear to your honors necessary.

Signatures.

Signatures.



MONEY





MONEY

Money, or the medium of exchange, in the United States consists of gold, silver, nickel and composition coins, and the paper money issued by the government and the national banks.

COINS OF THE UNITED STATES

The following tables show the denominations, weight, and fineness of the coins of this country.

Gold

DENOMINATIONS.	Fine Gold Contained.	Alloy Contained.*	Weight.
One dollar (\$1). Quarter eagle (\$2.50) Three dollars (\$3). Half eagle (\$5). Eagle (\$10). Double eagle (\$20).	69.66 116.10 232.20	Grains. 2.58 6.45 7.74 12.90 25.80 51.60	Grains. 25.80 64.50 77.40 129.00 258.00 516.00

^{*}The alloy neither adds to nor detracts from the value of the coin.

Silver

Denominations.	Fine Silver Contained.	Alloy Contained.	Weight.
Standard dollar Half dollar Quarter dollar Dime	173.61 86.805	Grains. 41.25 19.29 9.645 3.858	Grains. 412.50 192.90 96.45 38.58

Prior to the Act of February 21, 1853, all silver coins were legal tender in all payments whatsoever. The Act of February 21, 1853, reduced the weight of all silver coins of less denomination than the silver dollar about 7 per cent, to be coined on gov-

ernment account only, and made them legal tender in payment of debts for all sums not exceeding five dollars. No foreign coins are legal tender in the United States.

Minor

Denominations.	Fine Copper Contained.	Alloy Contained.	Weight.
Five cents*		Grains. 19.29 2.40	Grains. 77.16 48.00

^{*} Seventy-five per cent copper, 25 per cent nickel.

Troy weights are used, and, while metric weights are by law assigned to the half and quarter dollar and dime, troy weights will continue to be employed, 15.432 grains being considered as the equivalent of a gram, agreeably to the Act of July 28, 1866.

The weight of \$1,000 in United States gold coin is 53.75 troy ounces, equivalent to 3.68 pounds avoirdupois. The weight of \$1,000 in standard silver dollars is 859.375 troy ounces, equivalent to 58.92 pounds avoirdupois, and the weight of \$1,000 in subsidiary silver is 803.75 troy ounces, equivalent to 55.11 pounds avoirdupois.

Where Coins Are Made

The coins of the United States are made at the mint in Philadelphia, and at the branch mints in New Orleans, San Francisco, Carson City, and Denver. Those coined in Philadelphia have no mint mark on them, but those coined in New Orleans have an O on the reverse side, below the eagle; those coined at San Francisco an S; those coined at Carson City, CC; and those coined at Denver a D.

Total Number and Value of United States Coins

The total number of gold pieces coined at the mints of the United States from their organization, 1792, to June 30, 1902, was 206,517,774, of a total value of \$2,328,134,400.50; total number of silver coins, 1,736,628,993, of a total value of \$861,553,027.50; total number of minor coins, 2,019,854,160, of a total value of \$37,943,273.97; total number of coins of all kinds, 3,963,000,927, of a total value of \$3,227,630,701.97.

[†] Ninety-five per cent copper, 5 per cent tin and zinc.

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Legal Tender Value of Coins

Legal tender is a term used to designate money which may be lawfully used in the payment of debts.

Gold Coin is legal tender at its nominal or face value for all debts, public and private, when not below the standard weight and tolerance prescribed by law; and when below such standard and legal tolerance it is legal tender in proportion to its weight.

The Standard Silver Dollar is legal tender for all debts, public and private, without regard to the amount, except where otherwise expressly stipulated in the contract.

The Trade Dollar, a silver piece no longer coined, is not legal tender for any amount; nor is any of the commemorative coinage, such as the Columbian Exposition issue.

The Subsidiary Silver Coins, half dollars, quarters and dimes, are legal tender in sums not exceeding ten dollars, in payment of all public and private debts.

Minor Coins, all coins of the United States of smaller denomination than dimes, are legal tender for single payments not exceeding twenty-five cents.

PAPER MONEY OF THE UNITED STATES

The paper money of this country consists of four kinds: first, legal tender notes, which are divided into United States notes and Treasury notes; second, national bank notes; third, gold certificates; fourth, silver certificates.

The Legal Tender Notes of the United States are bills issued merely on the credit of the government. The acts of 1875 and 1882, however, direct the Treasurer of the United States to hold \$100,000,000 as a reserve for their redemption.

The National Bank Notes are issued by the national banks and guaranteed by the government, the banks depositing United States bonds as security.

Gold and Silver Certificates are issued by the government against deposits of gold and silver coin, and are exchangeable for the coin on demand. The Treasury holds the coin so deposited as a trust fund. The certificates represent the coin and are used in preference to it merely because of greater convenience in handling.

Legal Tender Value of Paper Money

United States Notes are legal tender for all debts, public and private, except duties on imports and interest on the public debt.

Treasury Notes issued under the act of July 14, 1890, are legal tender for all debts, public and private, except where otherwise expressly stipulated in the contract.

Gold and Silver Certificates are not legal tender, but are receivable for customs and all public dues.

National Bank Notes are not legal tender, but are receivable for all public dues except duties on imports, and may be paid out by the government for all salaries and other debts and demands owing by the United States to individuals, corporations and associations within the United States, except interest on the public debt and in redemption of the United States notes and Treasury notes.

AMOUNT OF MONEY IN CIRCULATION

A statement issued by the Treasury Department shows the various kinds and amounts of money in circulation Oct. 1, 1905, to be as follows:

Gold coin		\$652,330,135
Standard silver dollars		79,436,901
Subsidiary silver		105,539,966
United States notes		336,338,926
Treasury notes, 1890		8,764,858
Gold certificates		471,595,979
Silver certificates		469,973,307
National bank notes		500,250,319
Total	0	2 624 220 201
10tal	· 40 /	4,044,400,001

This would give about thirty-two dollars to every man, woman and child in the country.

HOW TO SEND MONEY

There are various methods in vogue for sending money. The choice between them is largely a matter of circumstance and convenience.

Bank Drafts.—A draft on some reliable bank is by far the best and most business-like way to send large amounts of money. It is safe, convenient and cheap.

Postoffice Order.—By postoffice order is also a safe and reliable way to send money. It costs a little more than to remit by

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draft, but it is equally secure, and many times more convenient, because the postoffice is accessible at all hours of the day.

Registered Letters.—The government promises special care in handling and transmitting a registered letter or package, but is liable not to exceed twenty-five (\$25) dollars in case the letter or package is lost. This applies only to first-class registered matter.

Express Orders.—The express order, as to security, has all the advantages of the bank draft or postoffice order. Serious disadvantages often arise, however, when the express office on which the order is drawn has not the money on hand to pay it, consequently the holder of the order has to wait the slow action of the company's agents in getting the amount forwarded from some other office.

HOW MONEY IS SENT BY TELEGRAPH

Telegraph offices are supplied with blanks for sending money, and to know just how it is done might be no small relief in an emergency. If by any accident one finds himself far from home and moneyless he can telegraph for money and get a remittance at once. The friend to whom the telegram is sent should take the precaution to satisfy himself that the message is from the person whose name is attached to it. He then takes his money to the telegraph office and makes out the following blank:

No	Chicago, Ill
The Western Unio	on Telegraph Company
	· · · · · · · · · · · · · · · · · · ·
• • • • • • • • • • • • • • • • • • • •	Dollars
for me, subject to the foregoing tern	ns and conditions, which are agreed to
(Signature)	
(Address)	
Amount of Transfer, \$	
Telegraph Service	
Other Service	
Total \$	
	June 10, 1904.
	may
	ace of personal identity, I hereby author-
ize and direct The Western Union	Telegraph Co. to pay within named sum
of dollars, at my	risk, to such person calling for the same
as the proper office manager or ag	ent of said company shall believe to be
said	
(Signature)	

Charges of 1 per cent are made on all sums of \$25 or over, and for smaller amounts 25 cents in each case.

WHAT TO DO WITHIMUTILATED OR WORN-OUT MONEY

The Treasury laws of the United States provide that any one who owns a worn-out, mutilated, or very dirty government note can have a newly printed one therefor by simply presenting the old note at the Treasury building at Washington, either in person or by mail.

The old bills handed in to the department, though still good enough to pass for their face value anywhere, are always destroyed. It is estimated that the old bills sent in to the department for redemption amount to the enormous total of 300,000 bills per day, and their total value to over a million dollars.

Although many private individuals have old bills redeemed at the Treasury, the very great majority of the old bills sent in to be exchanged for new ones are received from banking houses in different parts of the country. Every time any banks come across dilapidated bills they put them aside, and when a few hundred have accumulated they are bundled up carefully and sent to the Treasury by registered letter or express. In each instance the amount of money contained must be plainly marked on the wrapper

As might well be expected, there are many unscrupulous people who in sending in a bundle of old bills are so dishonest as to mark the contained amount at a figure higher than it really is. Other dishonest people insert one or two counterfeit notes in the midst of their bundle of good ones. In each case, however, these would-be criminals fail in their purpose and are put to a great deal of annoyance besides.

As each bundle of bills comes in, it is counted in the presence of the person delivering it, the number of bills of each denomination in each package being carefully checked off by both the outsider and the Treasury clerk. If the count is satisfactory to both, the parcel is again tied up, secured with the Treasurer's seal, and the messenger goes away with a receipt. Otherwise the whole batch is returned to the sender, who must stand the responsibility if any of the money is lost in going back.

Redemption of Fractional Silver Coins

1. The holder of any of the silver coins of the United States of smaller denominations than one dollar may, on presentation of the same in sums of twenty dollars, or any multiple thereof, at MONEY 317

the office of the Treasurer or any Assistant Treasurer of the United States, receive therefor lawful money of the United States.

- 2. The coins for exchange should be put up by denominations, and each package marked with the amount it contains.
- 3. No coins mutilated so as to be unfit for circulation will be received.
- 4. When the coins are forwarded to the Treasury by express, they should be addressed to the Treasurer U. S., Washington, D. C.

ISSUE AND REDEMPTION OF MINOR COINS

Issue of Minor Coins

- 1. The minor coins of the United States of the denominations of one cent, three cents, and five cents, are issued and forwarded free of expense, upon application to the Superintendent of the Mint at Philadelphia, for lawful money of the United States in sums of twenty dollars, or multiples thereof. Remittances may be made by postoffice money orders or sight drafts to the order of said superintendent, payable in New York or Philadelphia.
- 2. The Treasurer and Assistant Treasurers are authorized to pay out, for United States notes, any minor coins not needed in the current business of their offices.

Redemption of Minor Coins

- 1. Coins of copper, bronze, and copper nickel may be presented in sums of twenty dollars, or multiples thereof, assorted by denominations and issues, at the mint in Philadelphia, or to the Treasurer or any Assistant Treasurer, for redemption in lawful money.
- 2. A letter of advice should accompany the package, stating the amount and kind of coins, and the name of the owner.
 - 3. Mutilated minor coins will not be redeemed or exchanged.

COUNTERFEIT MONEY

A counterfeit bank note is a fac-simile of the genuine, or as nearly like it as it is possible to make it. A spurious note is one whose designs are different from the genuine, and is intended to pass in places where the genuine is unknown. An altered note is one that is altered from a lower to a higher

denomination; or on a broken or bogus bank, having the name or locality changed for that of some reputable bank. A cut note is one made from pieces cut from a number of good bills. A little strip is cut from one genuine note, a little larger strip from another, and the strip cut from the first is placed in the place of it, and so on, until, by skillful cutting, one extra bill out of about every ten is made.

Rules for Detecting Counterfeit Coins

Gold.—A spurious gold coin may sometimes be detected by the dull sound it makes when thrown upon the counter. Its size and weight serve as an additional test, a spurious gold coin



THIS FIVE HUNDRED DOLLAR BILL IS COMPOSED OF SIXTEEN PIECES CUT FROM GENUINE NOTES, AND WAS SENT TO THE UNITED STATES TREASURER FOR REDEMPTION BY A NEW YORK BANK CLERK

usually being made larger than a genuine coin of the same denomination in order to give it the necessary weight. The milling or edge-work usually is imperfect, owing to the fact that the counterfeit coin is generally cast in a mold, while the genuine coin is stamped and cut with a die. All counterfeit coins have a greasy feel when rubbed between the fingers and thumb. But the most dangerous counterfeit gold coins are made from a die, and sometimes can only be detected by the acid test. Strong nitric acid, 6½ drachms; muriatic acid, ¼ drachms; water, 5 drachms, constitute the acid mixture necessary for the test. If the edge of a coin be scratched with a knife and exposed to a drop of this mixture, the color will change instantly if the coin is counterfeit, and if the coin is genuine the acid will have no effect upon it.

Genuine gold coins of large denominations are frequently debased by processes known as sweating, plugging, and filling. Sweating is done by means of abrasion, filing, or an acid bath. Plugging is done by boring a hole in the coin and filling the place with some base metal, which is then plated over with gold. Filling is done by sawing or splitting the coin into two thin pieces, removing the interior, filling in with base metal, joining the pieces together again, and then remilling and plating the edges.

Silver.—Most counterfeit silver coins are made from Babbitt metal, and are almost always molded. Glass is sometimes mixed with the metal to give the coins a ringing sound. This often makes them so brittle that they are shattered when thrown upon the counter. Their imperfect edges and greasy feel usually reveal them to be counterfeit. When they are made from a die, however, and antimony and lead are used in their composition, the acid test is generally required to detect their true character.

Five-Cent Pieces (nickels) have been extensively counterfeited, but usually are easily detected, being made of pewter or some other soft composition.

How to Detect Counterfeit Bills

- 1. Counterfeiters rarely, if ever, get the imprint or engraver's name perfect. The shading in the background of the vignette and over and around the letters forming the name of the bank on a good bill is even and perfect; on a counterfeit it is uneven and imperfect.
- 2. Examine the vignette or picture at the top of the note closely. If the note be genuine, the faces have a life-like expression, the eyes are well-defined, showing the pupil and the white distinctly, the drapery or dress fits well, looks easy and natural, and shows the folds very plainly; in short, the entire figure harmonizes. The sky is clear, or transparent, soft or even, not scratchy, and all the different objects have a finished appearance. In the genuine note all the small figures in the background are perfectly executed.
- 3. Examine the lettering. In a genuine bill it is absolutely perfect. There has never been a counterfeit put out but was more or less defective in the lettering.
- 4. Examine the medallion rulings and the circular ornaments around the figure carefully, and see if they are uniform, regular

and smooth. If there are two medallions on a note, designed to be alike, they are exactly alike, as they are from the same original die. This work is done by a geometrical lathe, a machine of great cost, which produces fine, ornamental circles of such exquisite uniformity and perfection that it is almost impossible for a counterfeiter to produce a good imitation. A microscope is a great aid in examining the finer work.

- 5. Examine the signature of the president and the cashier. In some counterfeits they are lithographed fac-similes, inked over with a pen, giving them the appearance of being stamped. The stroke has a dead color and rough edge, and the pen does not always follow the hair-stroke curve exactly. The genuine signatures, being written with a pen, look more or less glossy, and the stroke has a smooth edge.
- 6. The paper of a counterfeit U. S. note is always of an inferior quality, while the government has the best and most perfect system of manufacturing the highest grade of paper. The first notes printed on this paper, in 1869, had silk fiber distributed promiscuously all through the paper, then came notes having silk threads running through them lengthwise near the top and bottom, and later on notes having distinctive bands of fibers distributed across and near their ends. By holding the bills up to the light you can easily see the fibers or threads in each bill. This is one of the best tests of a genuine bill, because no counterfeiter can imitate the paper of the bills in this respect.
- 7. Bank notes that have been altered by what is called the "pasting process" can be detected by holding them to the light. The parts pasted on will then be easily discovered. If any alteration has been made by substituting letters or figures for others that have been erased, the denomination in the center of the note, if carefully examined, letter by letter, will be found to be blurred and improperly formed, and the parallel lines irregular and imperfect.
- 8. The texture of the paper between the letters is frequently destroyed. This defect can be discovered by comparing the paper between the letters with that immediately above and below them. Sometimes the ink of the altered part is different from the rest of the note.
- 9. The ink used in genuine notes is very difficult to imitate. It gives a clear, glossy impression, while counterfeiter's ink looks dull, smutty and muddy.

10. The numbers on the genuine bills are printed in either red or blue ink of a permanent brilliancy, so that no matter how dim the rest of the bill has become, the numbering always stands out clear and distinct.

These rules are especially approved by New York bankers.

One should be careful not to be imposed upon by a stranger seeking the accommodation of having one large bill exchanged for several small ones.

One should acquire the habit of looking sharply at a bill before taking it, especially of a stranger, and, more especially, at a place of amusement, or where there is a special tendency to haste and liability to imposition.

POSTAL INFORMATION

POSTAL SERVICE OF THE WORLD

Two-thirds of all the letters which pass through the postoffices of the world are written by and sent to people who speak English. There are substantially 500,000,000 persons speaking colloquially one or another of the ten or twelve chief modern European languages, and of these about 25 per cent, or 125,000,000 persons, speak English. About ninety million speak Russian, seventy-five million German, fifty-five million French, forty-five million Spanish, thirty-five million Italian and twelve million Portuguese, and the balance Hungarian, Dutch, Polish, Flemish, Bohemian, Danish and Norwegian. Thus, while only one-quarter of those who employ the facilities of the postal departments of civilized governments speak, as their native tongue, English, two-thirds of those who correspond do so in the English language.

This situation arises from the fact that so large a share of the commercial business of the world is done in English, even among those who do not speak English as their native language. There are, for instance, more than 20,000 postoffices in India, the business of which in letters and papers aggregates more than 300,000,000 parcels a year, and the business of these offices is done chiefly in English, though of India's total population, which is nearly 300,000,000, fewer than 300,000 persons either speak or understand English.

Though 90,000,000 speak or understand Russian, the business of the Russian post department is relatively small, the number of letters sent throughout the czar's empire amounting to less than one-tenth the number mailed in Great Britain alone, though the population of Great Britain is considerably less than one-half of the population of Russia in Europe.

The Southern and Central American countries, in which either Spanish or Portuguese is spoken, do comparatively little post-office business; the total number of letters posted and collected a year in all the countries of South and Central America and the West Indies being less than in Australia. Chile and Argentina are, in fact, the only two South American countries in which any important postal business is done, and most of the letters received from or sent to foreign countries are not in Spanish, but in English, German or Italian.

POSTAL SERVICE OF THE UNITED STATES

The Growth of the postal service of the United States is amazing. In 1800 there were 903 postoffices, 20,817 miles of mail routes and yearly revenues of \$280,804. To-day the postoffices number over 74,000, there are over a half million miles of mail routes, and the yearly revenues exceed \$134,000,000.

The postal service of the United States handles over 50 per cent more mail matter than the postal service of Great Britain, about 100 per cent more than the postal service of Germany, and over 100 per cent more than the postal service of France.

Domestic Rates of Postage.—All mailable matter to points in the United States, Canada, Mexico, Cuba, Porto Rico, Hawaii, Guam, Tutuila, and the Philippines, is divided into four classes under the following regulations:

First-Class Matter.—This class includes letters, postal cards, "post-cards," and anything sealed or otherwise closed against inspection, or anything containing writing not allowed as an accompaniment to printed matter under class three.

Rates of letter postage, two cents per ounce or fraction thereof.

Rates on local or drop letters at free delivery offices, two cents per ounce or fraction thereof. At offices where there is no free delivery by carriers, one cent per ounce or fraction thereof.

Rates on postal cards, one cent (double or "reply" cards, two cents). Nothing must be added or attached to a postal card, except that a printed address slip not larger than 2 inches by ¾ of an inch may be pasted on the address or message side. The addition of anything else subjects the card to letter postage. Cards that have been spoiled in printing or otherwise will be redeemed from the original purchasers at 75 per cent of their face value, if unmutilated. "Post cards" or private mailing cards bearing written messages may be transmitted in the domestic mails at the rate of a cent apiece, stamps to be affixed by the sender; such cards to be sent openly in the mails.

Rates on Specially Delivered Letters, ten cents on each letter in addition to the regular postage. This entitles the letter to immediate delivery by special messenger. Special delivery stamps are sold at postoffices, and must be affixed to such letters. An ordinary ten-cent stamp affixed to a letter will not entitle it to special delivery. The delivery, at carrier offices, extends to the limits of the carrier routes. At non-carrier offices it extends to one mile from the postoffice. Postmasters are not obliged to deliver beyond these limits, and letters addressed to places beyond must await delivery in the usual way, notwithstanding the special delivery stamp.

Prepayment by stamps invariably required. Postage on all letters should be fully prepaid, but if prepaid one full rate and no more, they will be forwarded, and the amount of deficient postage collected on delivery; if wholly unpaid, or prepaid with less than one full rate and deposited at a postoffice, the addressee will be notified to remit postage; and if he fails to do so, they will be sent to the Dead Letter Office; but they will be returned to the sender if he is located at the place of mailing, and if his address be printed or written upon them.

Letter rates are charged on all productions by the typewriter or manifold process, and on all printed imitations of typewriting or manuscript, unless such reproductions are presented at postoffice windows in the minimum number of twenty identical copies separately addressed.

Letters (but no other class of mail matter) will be returned to the sender free, if a request to that effect is printed or written on the envelope. There is no limit of weight for first-class matter fully prepaid.

Prepaid letters will be reforwarded from one postoffice to another upon the written request of the person addressed, without additional charge for postage. The direction on forwarded letters may be changed as many times as may be necessary to reach the person addressed.

Second-Class Matter.—This class includes all newspapers, periodicals, or matter exclusively in print and regularly issued at stated intervals as frequently as four times a year, from a known office of publication or news agency, to actual subscribers or news agents, and transient newspapers and publications of this class mailed by persons other than publishers. Publications having the characteristics of books and such as are not subscribed for on account of their literary merits, but because of other inducements, are not eligible to second-class privileges. Second-class matter also includes periodical publications of benevolent and fraternal societies, organized under the lodge system and having a membership of a thousand persons, and of the bulletins and proceedings of strictly professional, literary, historical, and scientific associations and institutions, trade unions, etc., provided only that these be published at stated intervals not less than four times a year, and that they be printed on and be bound in paper. Publishers who wish to avail themselves of the privileges of the act are required to make formal application to the department through the postmaster at the place of publication, producing satisfactory evidence that the organizations represented come within the purview of the law, and that the object of the publications is to further the objects and purposes of the organizations.

Rates of Postage to Publishers, one cent a pound or fractional part thereof, prepaid in currency. Publications designed primarily for advertising or free circulation, or not having a legitimate list of subscribers, are excluded from the pound rate, and pay third-class rates.

Second-class publications must possess legitimate subscription lists [approximating 50 per cent of the number of copies regularly issued and circulated by mail or *otherwise*. Unless they do, pound-rate privileges are revoked or withheld.

Publications sent to actual subscribers in the county where published are free, unless mailed for local delivery at a lettercarrier office.

Rates of postage on transient newspapers, magazines, or periodicals, one cent for each four ounces or fraction thereof. It should be observed that the rate is one cent for each four ounces, not one cent for each paper contained in the same

wrapper. This rate applies only when a complete copy is mailed. Parts of second-class publications or partial or incomplete copies are *third-class matter*. Second-class matter will be entitled to special delivery when special delivery ten-cent stamps are affixed in addition to the regular postage.

Transient second-class matter must be so wrapped as to enable the postmaster to inspect it. The sender's name and address may be written in them, but any other writing subjects the matter to letter postage. The name and address of the

sender may also be written on the wrapper.

Third-Class Matter.—Mail matter of the third class includes printed books, pamphlets, engravings, circulars in print (or by the hectograph, electric-pen, or similar process when at least twenty identical copies, separately addressed, are mailed at postoffice windows at one time), and other matter wholly in print, proof-sheets, corrected proof-sheets, and manuscript copy accompanying the same.

The rate on matter of this class is one cent for each two ounces or fraction thereof.

Manuscript unaccompanied by proof-sheets must pay letter rates.

Third-class matter must admit of easy inspection, otherwise it will be charged letter rates on delivery. It must be fully prepaid, or it will not be forwarded.

The limit of weight is four pounds, except single books in separate packages, on which the weight is not limited. It is entitled, like matter of the other classes, to special delivery when special delivery stamps are affixed in addition to the regular postage.

Upon matter of the third class, or upon the wrapper or envelope inclosing the same, or the tag or label attached thereto, the sender may write his own name, occupation, and residence or business address, preceded by the word "from," and may make marks other than by written or printed words to call attention to any word or passage in the text, and may correct any typographical errors. There may be placed upon the blank leaves or cover of any book, or printed matter of the third-class, a simple manuscript dedication or inscription not of the nature of a personal correspondence. Upon the wrapper or envelope of third-class matter, or the tag or label attached thereto, may be printed any matter mailable as third-class, but there must be left on the address side a space sufficient for the legible address and necessary stamps.

Fourth-Class Matter.—Fourth-class matter is all mailable matter not included in the three preceding classes which is so prepared for mailing as to be easily withdrawn from the wrapper and examined. It embraces merchandise and samples of every description, and coin or specie.

Rates of postage, one cent for each ounce or fraction thereof (except seeds, roots, bulbs, cuttings, scions, and plants, the rate on which is one cent for each two ounces or fraction thereof). This matter must be fully prepaid, or it will not be forwarded. The affixing of special delivery ten-cent stamps in addition to the regular postage entitles fourth-class matter to special delivery. (See remarks under First-Class Matter.)

Articles of this class that are liable to injure or deface the mails, such as glass, sugar, needles, nails, pens, etc., must be first wrapped in a bag, box, or open envelope and then secured in another outside tube or box, made of metal or hard wood, without sharp corners or edges, and having a sliding clasp or screw lid, thus securing the articles in a double package.

Such articles as poisons, explosives, or inflammable articles, live animals, insects, fruits, or vegetable matter liable to decomposition, or substances exhaling a bad odor will not be forwarded in any case.

Firearms may only be sent in detached parts.

Limit of weight of fourth-class matter, four pounds.

The name and address of the sender, preceded by the word "from," also any marks, numbers, names, or letters for the purpose of description, such as prices, quantity, etc., may be written on the wrapper of fourth-class matter without additional postage charge. A request to the delivering postmaster may also be written asking him to notify the sender in case the package is not delivered.

Registration.—All kinds of postal matter may be registered at the rate of eight cents for each package in addition to the regular rates of postage, to be fully prepaid by stamps. Each package must bear the name and address of the sender, and a receipt will be returned from the person to whom addressed. Mail matter can be registered at all postoffices in the United States.

An indemnity, not to exceed \$25 for any one registered piece, or the actual value of the piece, if it is less than \$25, shall be paid for the loss of first-class registered matter.

Domestic Money Orders.—Domestic money orders are issued

by money-order postoffices for any amount up to \$100, at the following rates:

For sums not exceeding \$2.50, 3 cents; over \$2.50 to \$5, 5 cents; over \$5 to \$10, 8 cents; over \$10 to \$20, 10 cents; over \$20 to \$30, 12 cents; over \$30 to \$40, 15 cents; over \$40 to \$50, 18 cents; over \$50 to \$60, 20 cents; over \$60 to \$75, 25 cents; over \$75 to \$100, 30 cents.

Stamped Envelopes.—Embossed stamped envelopes and newspaper wrappers of several denominations, sizes and colors are kept on sale at postoffices, singly or in quantities, at a small advance on the postage rate. Stamps cut from stamped envelopes are valueless; but postmasters are authorized to give good stamps for stamped envelopes or newspaper wrappers that may be spoiled in directing, if presented in whole condition and with satisfactory evidence.

Foreign Postage Rates.—The rates of postage to all foreign countries and colonies (except Canada, Cuba and Mexico) are as follows: Letters, 15 grams (½ ounce), 5 cents; postal cards, each, 2 cents; double postal cards, each, 4 cents; newspapers and other printed matter, per 2 ounces, 1 cent. Commercial papers: Packets not in excess of 10 ounces, 5 cents; packets in excess of 10 ounces, for each 2 ounces or fraction thereof, 1 cent. Samples of merchandise: Packets not in excess of 4 ounces, 2 cents; packets in excess of 4 ounces, for each 2 ounces or fraction thereof, 1 cent. Registration fee on letters or other articles, 8 cents.

Ordinary letters for any foreign country (except Canada and Mexico) must be forwarded whether any postage is prepaid on them or not. All other mailable matter must be prepaid, at least partially. Matter mailed in the United States addressed to Canada, Cuba or Mexico is subject to the same postage rates and conditions as it would be if it were addressed for delivery in the United States. Full prepayment is required upon all registered articles; and postage upon all articles other than letters is required to be prepaid, at least in part. If the postage is not prepaid in full, double the amount of the deficiency will be collected of the addressee when the article is delivered. The rate on "commercial papers" per 2 ounces is the same as for "printed matter," except that the lowest charge on any package, whatever its weight, is 5 cents. The rate on samples of merchandise per 2 ounces is also the same as for "printed matter," except that the lowest charge on any package, whatever its weight, is 2 cents.

Articles of every kind and nature which are admitted to the United States domestic mails are admitted, at our domestic postage rates and conditions, to the mails exchanged between the United States and the United States Postal Agency at Shanghai, China. Articles addressed for delivery at the following places in China, namely: Chefoo (Yentai), Chin-Kiang, Chung-King, Hankow, Hang-Chow, Ichang, Kaiping, Kaigan, Kinkiang, Nanking, New-Chwang, Ningpo, Ourga, Peking, Shanghai, Taku, Tientsin, Wenchow, Wuchang, Wuhu and Yentai, are transmissible in the mails made up at San Francisco, Seattle and Tacoma for the United States Postal Agency at Shanghai; but at places other than Shanghai additional charges for postage may be collected of the addressees upon the delivery of the articles.

Parcels Post.—The first parcels post convention between the United States and any country in Europe was signed between the United States and Germany on August 26, 1899, and went into operation October 1. It was the beginning of a postal service by means of which articles of merchandise may be exchanged by mail between the two countries, provided they are put up in packages which do not exceed 4 pounds 6 ounces in weight. The postage rate for parcels going from the United States to Germany is fixed at 12 cents for each pound or fraction of a pound. The rate in Germany on parcels for the United States is fixed at 1 mark 40 pfennigs a parcel, whatever its weight. Provision is made for customs declaration and pavment. The United States had parcels post conventions with several countries in Central and South America and the West India Islands, but this was the first convention made with any country in Europe. The law empowers the Postmaster General to make such conventions by and with the advice and consent of the President.

BE CAREFUL

The carelessness and oversight of a hurrying people is exemplified by the report of the Dead Letter Office at Washington, that there are on the average 213 letters and parcels without any address whatever received there daily. Considerably more than half of them contain money. In a single year (1903) the Dead Letter Office received 249,255 letters, all containing postage stamps, and besides these \$5,821.96 in postage stamps that

had gotten out of the letters were found loose in the mail bags.

The Dead Letter Office returns what it can, but the carelessness or ignorance which misdirects letters is very apt to record no return address for the enlightenment of the postoffice. In consequence, while there were in the same year 2,544,379 letters sent to the Dead Letter Office, which were subsequently delivered to their owners, and 5,806 returned to the writers, there were 6,111,493 that gave no clue and were destroyed. There were sold at auction 5,702 pieces of merchandise that came to the Dead Letter office and could not be delivered; also 936 parcels of books and 476 pieces of jewelry.

Suggestions.—Always write "Transient," or "General Delivery," on matter for persons not living where you send mail to them.

When directing to cities, always add the street and number, or postoffice box, of the person addressed, unless marked "Transient," or "General Delivery."

To insure certainty in dispatch of mail, give the county in which the postoffice is, and spell out the name of the State in full.

If you will write or print your name and address (and the contents, if a package) in the upper left-hand corner of your mail matter, it will be returned to you for correction, if improperly addressed, or insufficiently paid, and if not called for at its destination, it can be returned to you without going to the dead letter office. If a letter, it will be returned free.

Register all valuable letters and packages.

PROPERTY, REAL AND PERSONAL

All property is divided into real estate and personal property.

1. Real Estate means land and everything growing or built upon it, such as trees, houses and all kinds of buildings.

2. Personal Property is everything else. Thus all capital stock of railroad companies and other companies is personal property, even though the property of corporations consists only of land.

A note, draft or claim upon a debtor is personal property. Real estate may change to personal property. Thus, trees growing and coal in mine are real, but when trees are cut down and coal is mined, they become personal. Real seems to imply the immovable character of property.

KINDS OF OWNERSHIP

1. Full Ownership.—The greater part of real estate in this country is owned in full absolute ownership; in legal terms, it is owned in fee simple.

One may do what he pleases with the property he owns in full. He can sell it, give it away or destroy it. As long as he injures no one else by doing so, no one has a right to interfere.

2. Life Ownership.—Property may be given to a person to hold and to use as long as he lives. He may use it as he sees fit; occupy and use it himself or rent it. But he cannot (1) sell or mortgage it; (2) he cannot transfer it to another by will; (3) he must not decrease the value by cutting down trees or taking down buildings. He can, however, transfer or assign his life ownership to another.

How Obtained.—A life ownership may be given by the real owner to one for whom he wishes to provide as long as the party may live, as a profligate son or invalid child.

A widow is by law entitled to a life interest in one-third of all the lands her husband has owned since their marriage. That is called her *dower*. In many States a widower is entitled to a life interest in all lands which his wife has owned since their marriage, provided a child has been born to them.

- 3. Joint Ownership.—Here each person has a present and equal right to possession. All can use it or sell it together, each can dispose of his share as he pleases. If in a division they cannot agree, one can bring suit and the court will divide it.
- 4. To Hold in Trust.—Sometimes property is placed in trust of a third party for the use of children under age. Such a person is called a *trustee*, and is entrusted with the duty of managing the property and applying the profits to the use of those to be benefited.

The rights of such trustee are usually defined by a will. The powers of the trustee over the property are governed by the deed or will creating the trust.

The trustee can do nothing with the estate to benefit himself. The beneficiary has no power over the property; in some cases he cannot even transfer his rights to receive the income to another.

For laws governing the sale and transfer of real estate or interest therein, see *Deeds*, *Leases*, *Mortgages*. For laws governing sales of personal property, see *Sales*, *Negotiable Notes*, *Chattel Mortgages*.

RIGHTS AND OBLIGATIONS OF PARENTS AND CHILDREN

In ancient domestic life the father ruled as absolute monarch over the family. So it is still in oriental countries. Christian civilization has greatly modified this and laws have been enacted that set forth the relation of parent and child, defining the duties and obligations of each.

RIGHTS OF PARENTS

- 1. As long as a child is under age he is subject to the control of the parents, who have all reasonable authority to enforce obedience. As long as a child is properly treated by the parents no one has a right to interfere nor to take away and retain a child against their wishes.
- 2. Adopting a Child.—When a child is adopted by another family its parents lose their claim upon it and the adopting persons take their place. A child cannot be adopted without the consent of its parents, but if consent is once given it cannot be revoked.

A child over fourteen must himself consent to the adoption. The court has in all cases the right to consent to or refuse the adoption.

Application must, therefore, be made at the county court and the judge will consider it and pass upon it.

- 3. **Punishment.**—Parents have a right to punish their minor children, providing they are not guilty of cruelty. Brutality is severely punished by law as a crime. The punishment must be reasonable, leaving no bruises nor injuring the health of the child.
- 4. Claims upon Earnings.—While the child is a minor parents have a right to all his earnings. They can claim them of his employer. Parents, however, may free the child and allow him to collect and use his own wages. When this is once made public the parents cannot thereafter collect the child's wages.
- 5. A Runaway Child.—A child has no right to leave home without permission of the parents; if he does he can be brought back by force. Relations or others who would keep him can be forced by law to give him up unless it can be shown that the father is brutal in his treatment of the child or is not capable

because of drunkenness or other causes to properly care for the child.

OBLIGATIONS OF PARENTS

Obligation to Support.—The law requires that parents shall support their minor children. A child having property of his own does not relieve the parents from supporting him. They can, however, by applying to the court, get permission to use a part or all of the income from the child's property for his support. Beyond this the parents have no claim upon or control over the child's property.

CHILDREN'S RIGHTS AND OBLIGATIONS

- 1. A child can own property, over which the parents have no control, except the use of the income of the same for the support of the child, as stated above.
- 2. Where it is shown that parents are unable to support themselves the child is under legal obligations to support and care for them, at least do what he can toward such support.
- 3. If a child commits a premeditated crime he is personally liable; parents cannot be held responsible for crimes committed by their minor children.
- 4. Guardian.—A guardian may be appointed over an orphan child, or the child may choose his own guardian, who in a legal sense exercises all the authority of a parent.





SALESMANSHIP

Skill in the art of selling goods has been reduced to a science, and schools for teaching this new science of "salesmanship," as it is called, have been established at New York, Chicago, and other large cities in the United States.

How to Sell Goods.—The following instructions, drawn up by Mr. John A. Howland, an experienced and successful salesman, are worthy of careful study by those about to enter upon a mercantile life and by others who have thus far failed of the success they hoped for when entering upon their business career.

The Highest Class Salesman never appears to work hard to make a sale. Usually he is not a great talker. It is the clerks in cheap stores who talk hard and fast; they hustle and sweat and appear to try to corner their customers and to browbeat

them into buying. The first-class salesman is cool and easy in manner, because he has studied his art and knows just how to proceed to make a sale. The great talker may be a good salesman, but he chooses the hardest road and necessarily accomplishes less, since he spends too much energy on each customer.

Method Necessary.—The salesman who wants to pass everybody on the road must have, either consciously or unconsciously,

a definite method of procedure.

How to Proceed.—Before trying to sell anything find out what the person can buy. When a man has told you just what he wants he has committed himself and he has given you a distinct advantage. In business it is the effort of each man to make the other man "come to him," and as soon as your prospective customer has told you what he wants—material, style, price, etc.—he has "come to you"; all you have to do is to fill the order. If you can do that, there is a strong presumption in favor of a sale without much further effort. Even if he changes his mind and refuses to buy the thing he asked for, you can ask once more his desires and again try to satisfy them in the required article.

Illustration.—Suppose, for example, you are selling suburban lots on a commission. You go out on the train some morning; perhaps you get to talking on the way out with some of your firm's prospective customers. Don't talk at random; try to draw out your man as to what he wants, how much he can pay, cash or in payments. All that you learn about his business, his experience or lack of it in real estate deals, his income, his savings, etc, is just so much to your advantage, because, with all this information about him and his wants, you can pick out just one lot and, ignoring all the rest, spend all your time and energy talking up its merits. If you proceed skillfully you will not have to ask him for a deposit; he will probably ask you to accept one. If he does not get as far as this you have nothing for which to blame yourself, since you have followed the only intelligent method for making a sale.

Showing Goods at Random.—For you as a dry goods clerk to bring out goods at random, without first ascertaining just what a customer wants, shows lack of method and therefore lack of intelligence. Ten chances to one you will not strike what the person wants. You have, therefore, placed yourself at a disadvantage at the outset, lowered your own dignity, and lessened the value of your judgment in the eyes of your prospective cus-

tomer. If he is a superior man he will resent this waste of time, and feel, even if he does not display, impatience.

How Some Sales are Lost.—If you first find out what a person wants and can pay for, you escape the serious danger of showing the prospective purchaser something he or she will want but cannot pay for. Many a possible sale is lost in just this way. If you show a woman a \$30 hat who has no intention of spending more than \$12, she may be so pleased with the more expensive article that nothing cheaper will suit her. But she is unable to buy the \$30 hat; therefore she hesitates long and finally leaves the shop without buying anything. If you had first found out that she expected to pay only \$12, you might have kept the \$30 beauties out of sight and so have easily satisfied her and completed the sale. This is a kind of failure that all successful salesmen must carefully guard against. Even if you should at last bring the woman who admired the \$30 hat to the point of buying the \$12 article she could pay for, you would have wasted time and energy that you might easily have saved.

Importance of Concentration.—Another advantage in first finding out what your customer wants is that you can talk so much more forcibly than you can if you scatter your efforts. Suppose you are selling men's shirts and you say: "Here's something nice at \$2.50." The man seems to like that; he picks it up and looks closely at it while you dilate on its good qualities. A minute later he says: "Well, I don't want to pay more than \$2." All you can do now is to go back to the \$2 line and say: "Well, these are nice, too," etc. Weak, isn't it? After committing yourself in favor of the more expensive grade of shirts, you have discounted beforehand all you can possibly say in favor of the \$2 article. If you want to talk effectively and convincingly, you must concentrate your attention on the one article the man can pay for.

If this rule of first finding out a customer's wants were strictly adhered to, think how much time would be saved from those terrors of the dry goods clerks, the women who are merely amusing themselves by fingering piece after piece of goods. Many times if such women were directly and courteously questioned they might admit at the start that they only wanted samples. By further inquiry as to color, weave, price, etc., think how quickly one could get rid of them, without giving offense, either.

Much Talk not Required.—Besides the direct saving in time

and energy you can effect by first getting a customer to state his wants, you save yourself a large percentage of effort and nervous strain by the procedure. After you have produced the article the man has asked for, there isn't much more for you to do; a few judiciously chosen words of admiration and encouragement at most. The man who has thought out his method beforehand does not need to make any great effort or talk much in order to make a sale.

Sell, or Know Why You Fail.—It is, of course, absolutely impossible to make a sale for every inquiry, but what an immense satisfaction it is to know accurately—as you can know if you follow this method—just when the failure to make a sale was not your own fault and just when it resulted from your own carelessness!

Your confidence and consequently your effectiveness constantly increase as you reduce your work to a systematic procedure. You always "know where you are at," you can note your own progress, and there is with such a method far less cause for possible discouragement. There is nothing so helpful as knowing the cause of each failure you make; for if you know your weak point you can guard against it next time.

The Only Way.—This cautious method of always finding out what a prospective customer wants before taking your goods to him is the only way to become a really high class salesman.

SHIPPING

Shipping is the transporting of goods by water. Ship-owners are common carriers, those who send goods are shippers. Owners sometimes charter their vessels to others, who then as charterers take the owner's place.

As common carriers, ship-owners or charterers are subject to all the laws that govern common carriers on land.

Exportation.—When goods are shipped abroad, or exported, they have to be *cleared* at a custom-house. This is done by the shipper filling out and swearing to what is called a *shipper's manifest*, containing a description of the goods shipped. A bill of lading is then given the shipper as in inland shipments.

A Bill of Lading is a document delivered by a master or owner of a vessel, or the officer of a transportation company, and

signed by such parties as an acknowledgment that the goods have been received for transportation.

The bill constitutes the contract between the shipper and the carrier. Three copies of the bill are made out; one is kept by the shipper, another by the party transporting the goods, and the third is sent to the person to whom the goods are directed.

When one of the bills has been used the others become void. The master usually makes certain exceptions in writing; as, "contents unknown" of loose goods; "not accountable for leakage or breakage" of liquids in bottles; "not accountable for leakage" of liquids in casks; and "pieces in dispute," if the shipper's list of articles differs from the ship's account. The master also makes notes of any goods which seem to be in bad condition, lest he should be compelled to make good or pay for any defect, as the bill of lading begins by stating them to be "shipped in good order and well conditioned."

Transfer of Bill of Lading.—The bill of lading stands for the property itself, and carries ownership with it. The consignee upon receiving it becomes the owner of it, and can assign the bill of lading and, of course, the right of the goods with it to another party.

Ship's Manifest.—With the aid of the manifests furnished by the shippers the ship's master makes out the ship's manifest, containing the name and tonnage of the vessel, the place to which it belongs, and the name of the master, besides a regular list of the ship's cargo, giving the mark and number of each separate package, the names of the persons by whom the different parcels of goods are shipped, and those of the persons to whom 'they are consigned, and a specification of the quality of the goods contained in each package. This manifest must be signed by the master of the ship, and he cannot clear for a foreign port without it. Within a certain number of hours after arrival at any port and before "bulk is broken," this manifest must be delivered by the ship's master to the customs officer of the port.

If the goods perish without fault of the master of a ship, the freight must be paid, otherwise the master or owner of a ship is liable for damages.

Loss or Injury.—As common carriers, owners of vessels or charterers are responsible for any loss or damages of the goods, whether caused by negligence of agents, master or crew on the voyage.

But, as on land, there are exceptions, namely: Carriers by sea are not responsible for damages which occur through some extraordinary peril of the sea, such as storms or piracy or fire at sea.

General Average.—A loss occurring to the cargo when in order to save the ship in a storm a part of it must be thrown overboard is called General Average.

The law is that if any part of the vessel or cargo is voluntarily sacrificed to save the rest, all the owners of both vessel and cargo must bear the loss in proportion to their interest.

Three conditions, however, are necessary to make it a general average: 1. The sacrifice must be necessary. 2. It must be made voluntarily. 3. It must succeed, i. e., the rest of the vessel must be saved.

Salvage relates to property abandoned at sea. Any one saving property which he finds abandoned at sea is entitled to large compensation for his services. This compensation is called salvage and is intended to encourage such services, which are usually attended with danger.

The amount of salvage varies according to the difficulty and danger and may be one-half of the value of the vessel and cargo saved. All who take part in the rescue, master, crew and owner, share in the salvage. If aid is rendered to a vessel in distress salvage is allowed.

Form of Bill of Lading

New York, December 10, 1904.

Sylvester Clyde, is master, now lying in the port of New York......and bound for the port of Rio Janeiro......500 barrels of flour,

In witness whereof I have affirmed to three bills of lading, all of this tenor and date; one of which being accomplished the others to stand void.

HENRY R. SANDFORD.

Contents and weight unknown.

[In the above form, Hanton is the shipper or consignor, Clyde the consignee, and Sandford the carrier. It might be signed by the master (Bollman) instead of by Sandford.]



BEWARE OF SWINDLERS

SWINDLING SCHEMES

Barnum, the great American showman, speaking from abundance of experience, declared that "the American people like to be humbugged." He might have gone farther without departing from the truth and added, "and they are the easiest people on the face of the earth to be swindled."

The millions of dollars that recently have been paid to persons conducting various fraudulent "get-rich-quick" schemes in all parts of the country, prove this to be true beyond question. Rich and poor, wise and otherwise, have all alike been duped by these pretended money-making schemes.

It is important, then, that every one should be on his guard against fraud, and the following brief words of caution should be ever kept in mind:

- 1. Remember that you can't get something for nothing, and the man who presents to you a seemingly plausible scheme with that purpose in view does so in his own interest and not yours. His game is, "Heads I win, tails you lose."
- 2. Put not your confidence in strangers, especially if you are yourself a stranger in a large city. The "confidence man" is abroad in the land.
- 3. Never be tempted into engaging in any scheme for making money in an underhand or dishonorable manner. Most people that go wool-gathering come back fleeced.
- 4. Never try to beat a gambler's own game. It is like betting against a sure thing.
- 5. Never sign your name to any writing until you are certain you understand its import, and never under any circumstances do so to accommodate a stranger. By neglecting to observe these simple precautions many a man and his money have been quickly parted.

A careful study of the swindling schemes here described will put the reader on his guard against being defrauded of his hardearned money by unprincipled sharpers.

THE "GREEN GOODS" SWINDLE

This is a scheme in which the swindlers act upon the theory that all men are more or less dishonest, and are ready to steal or defraud whenever they are sure they will not be found out. The headquarters of these swindlers are in New York City, and from there they send out a typewritten letter to a business man or farmer somewhere in the West, offering to sell him a certain amount of "green goods" at ten cents on the dollar. The "green goods" are referred to in such a manner as to make certain that the person receiving the letter will understand that counterfeit money is meant. No name is signed to the letter, but on a separate slip of paper a name and address are printed.

If a reply is sent in response to the letter a second letter is mailed to the intended victim, and enclosed with it is what purports to be a clipping from a newspaper, giving an account of some government plates having been stolen from the Treasury Department at Washington, and money printed from them and placed in circulation, and of so perfect a character that the government officials were not able to detect the difference between it and the genuine money. In this letter the pros-

pective purchaser is informed that he will be known hereafter in New York only by the name of "Mr. Evans," as it would not be safe to conduct the business with him under his right name The letter urges him to come on to New York and satisfy himself that the goods are all right. It assigns a meeting place and suggests a signal by which each is to recognize the other. If "Mr. Evans" goes to New York and is identified all right, the deal goes through. He is shown a package of genuine money, containing five thousand dollars in five and ten-dollar bills. examines the money carefully, and compares it with some good bills he has in his pocket. The result is satisfactory, and the victim turns over \$500 in good money for the five-thousand-dollar package, and puts what he thinks to be it into his grip and hurries away. But, alas, when he arrives at home and in secret examines his package he finds, to his amazement and sorrow, that it contains—not money, either good or counterfeit, but simply oblong pieces of coarse brown paper. A "dummy" package has been deftly substituted for the one that contained the five thousand dollars he had seen counted, and he finds himself out to the amount of five hundred dollars and the cost of his trip. Not only his money is gone, but his own respect for himself as an honest man is gone with it. And he is in no position to complain to the authorities, for he was himself engaging in a scheme to defraud his own neighbors, and so, like hundreds of others similarly victimized, he submits to his loss and humiliation in sorrowful silence

THREE CARD MONTE

This is an old but still commonly practiced swindling game. It is usually worked on trains or at county fairs. The player takes three cards, shows their faces to his intended victim, turns them down, shifts them around carelessly, and then asks him to pick a certain one of the cards out—the ace, for instance. The victim at once selects the right card. The player pretends to be mystified, and bets a half dollar that he can't do it again. The victim takes the bet and again promptly picks the right card. The sharper pretends to be awfully discomfited, but shifts the cards about again and with an oath declares he will bet \$40 that the "Smart Alec" can't tell where the ace is now. The victim, who has been watching the cards all the while, thinks he knows just where the ace is again, buts up his \$40 and picks out—not

the ace this time, but the two-spot. He thought he knew for a certainty just where the ace was all the time because he had noticed that one corner of that card was slightly turned up, which fact he thought the sharper had failed to observe, but which in truth was the very bait set by the sharper to catch the gudgeon. At the proper moment he deftly turned up the corner of another card and smoothed down that of the ace. No one should ever try to beat this game, as the sharper always "wins out."

SHELL GAME

This game also usually is worked at county fairs, and, like three card monte, its success depends upon sleight of hand deception. Three half shells of English walnuts and a little ball of hard rubber or celluloid are used in working the game. sharper rolls the ball around on a box or barrel-head, and covers it first with one shell and then with another. "Pick out the shell the ball is under and you get five dollars," he says. A confederate standing near replies: "I think I can beat that game easy enough," and at once picks out the shell the ball is under. To the apparent chagrin of the sharper, he walks off with the money in evident good humor with himself. One of the "innocents" in the crowd, who has watched the performance very closely and thinks he knows exactly how it was done, offers to wager \$10 he can pick the shell the little ball is under. He puts up his money, picks out the middle shell and-loses. Had he picked out either of the other shells the result would have been the same, for the ball at the time he picked was not under any of them, having been retained by the sharper in the grip of his little finger. And yet when he picked up one of the other shells he showed the crowd that the ball was under that. This is one of the most deceptive and successful games practiced by sharpers. Steer clear of it.

ENVELOPE TRICK

This trick is worked through the help of a confederate. One of the sharpers has a box of envelopes containing tickets with numbers on, indicating certain prizes displayed by the sharper. On paying a certain sum of money a person is allowed to pick out any of the envelopes and get the prize it calls for.

The confederate pays the price asked for a chance, and of course chooses an envelope which he knows contains a card

calling for a valuable prize, as a watch or a five-dollar bill. His success induces others to try their luck, and a rich harvest is often reaped by the sharpers in a few minutes. And then they move to some other spot to fleece a fresh crowd of innocents.

BUNCO

This confidence game has been exposed a great many times in the newspapers, but it still finds victims in all the large cities of the country. It usually requires as many as four sharpers to carry it through. The first move is for one of the sharpers to "meet by chance" some prosperous-looking stranger in the city and accost him familiarly something after this manner: "Why, how do you do, Mr. Wilson? How's the dry goods business up in Rockford?"

"Excuse me," the stranger replies, "but you are mistaken in the person. My name is Myers, not Wilson. I am from Springfield, not Rockford, and my line is hardware, not dry goods."

The sharper profusely begs his pardon, and at once communicates what he has learned to one of his confederates, who proceeds to look up particulars regarding Springfield's prominent citizens in the *American Bank Note Reporter*, while the first sharper keeps tab on Mr. Myers.

Presently the confederate "accidentally" meets the victim and exclaims: "Why, Mr. Myers, how do you do? How's everybody down at the Capital?"

"I beg your pardon, sir, but you have the advantage of me," replies Mr. Myers.

"Why, have you forgotten meeting me in company with my uncle, Mr. S. H. Jones, of the State National Bank, at Springfield?"

Of course Mr. Myers doesn't remember, but he hesitates to admit the fact, and finally is convinced that they have met before. Having once obtained the confidence of the Springfield merchant it becomes an easy matter to steer him into the den where certain other confederates of the sharper are in waiting to fleece the wealthy victim.

This is accomplished in many different ways, sometimes by means of some swindling game resembling faro, or by inducing him to cash a bogus check, or engage in a fraudulent game of cards, and occasionally by the administration of knockout drops and robberv.

FLIM FLAM

This swindle is played on merchants in the following manner: A man enters a store and calls for some trifling article, say a cake of shaving soap, and after fumbling in his pockets for change and finding none, hands out a ten-dollar bill. This the merchant changes and gives him back \$9.90. The sharper proceeds to count his change, but suddenly hesitates and says: "Oh, never mind, I find I have a dime after all, and there's no use in my taking all your small change. Just give me that bill back, and here's the exact amount."

While the merchant turns to the cash register to get the bill, the sharper slips the \$9.90 into his pocket, and at the same moment his confederate walks into the store, and as the merchant is handing back the bill and receiving the dime, he calls his attention to some article in the show case and engages him in conversation in such a clever manner as to make him forgetful of the transaction that has just taken place. While the merchant is waiting on the confederate the first sharper walks out of the store \$9.90 ahead.

The probability is that the merchant will never think of the transaction again or discover that he has been swindled.



GETTING THE FARMER'S SIGNATURE

PATENT FENCE SWINDLE

This is one of the numerous patent right frauds by which so many farmers have been imposed upon. It is worked as follows: A well-dressed, smooth-spoken stranger calls upon a farmer and shows him an artistic illustration of a patent farm fence, explains all about it and proves beyond question that it is the cheapest and most endurable fence every devised. farmer is soon convinced that the fence is bound to have a large sale, and is prevailed upon to take the agency for his township. All the fence man asks of the farmer in order to secure the exclusive right to manufacture and sell the fence in his township is to sign his name to a note for \$150. The farmer has dreams of placing one of his patent fences around every farm in the township, and realizing therefrom enormous profits. But when he goes to the city and prices the materials necessary for constructing the fence, he finds that they are so costly that the fence could not be made cheap enough to permit of its being sold at a price any farmer would be willing to pay for it. the meantime the note has been discounted at a bank, and passed into the hands of an innocent holder. The fence man has fled the country, and the farmer is bound to pay the \$150 and interest.

FENCE STRETCHER MACHINE FRAUD

This is one of the shrewdest frauds by which farmers are imposed upon. It is executed as follows: The sharper represents to the farmer that he is the agent of a company manufacturing and selling machines for stretching barb-wire in the construction of wire fences. He has a machine with him, but not for sale. All he desires is the privilege of exhibiting the value of his machine, and he offers to build the farmer thirty rods of fence without costing the farmer a cent, just to show how the machine operates. The farmer is asked to sign what appears to be a mere request to forward the desired fence material to his address. This being done the machine is placed in the barn to await the arrival of the materials for fence. In a few days another man turns up and presents to the farmer what proves to be an agreement to pay \$150 for the machine stored in his barn. The machine is of no earthly use to the farmer, but he finds he has been duped into signing his name to a paper acknowledging the receipt of the machine, and agreeing to pay \$150 therefor so many days after date He is legally obligated and must pay.



THE LIGHTNING-ROD SWINDLE

The lightning-rod sharper calls upon a farmer and takes his order for the placing of rods on his barn in the following form:

Moline, Ill., August 9, 1904.

WILLIAM FELL: Please erect at your earliest convenience your lightning-rods on my barn, for which I agree to pay you 7 cents per foot, \$3 for each point, \$4 for each vane, \$5 for each arrow, \$1 for each bill or brace, cash when finished, or a note due six months from date thereof and bearing interest at seven per cent.

MORRIS HOMER.

After the contract is signed the sharper inserts a 5 before the 7, making the amount per foot 57 instead of 7 cents. And there being nothing said in the contract as to the number of points, vanes, etc., to be used, the lightning-rod man throws them in "good and plenty," so that instead of the business costing him about \$28 as he expected, he finds that the bill runs up to \$185, and he is required by law to pay, all because he was guilty of negligence in signing a contract in which the amount per foot to be paid for the rods was stated by a figure only, instead of being written out, and the number of vanes, arrows, braces, etc., was not specified, but left to the discretion of the party erecting the rods. Of course, if the farmer could prove that the figure 5 had been inserted after the contract was signed, and without his consent, it would make the contract void, but it is very seldom possible that this can be done.

Form of Swindling Contract and Note

Newton, Kans., Jan. 2, 1905.

One year after date, I promise to pay to John Dawson or bearer Fifteen Dollars when I sell by order Five hundred and Seventy-five Dollars (\$575) worth of hedge plants for value received, with interest at seven per cent. Said Fifteen Dollars when due is payable at Newton, Kans.

GEORGE W. ELLSWORTH,

Agent for John Dawson.

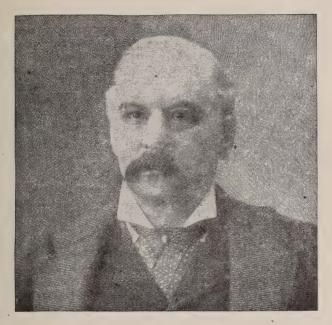
1. It looks very innocent and reads smoothly enough, but by cutting off the right-hand portion just after the word "or" in the first line, the sharper has in his possession a negotiable promissory note that is good in the hands of an innocent holder, and that can be discounted at a bank.

2. George W. Ellsworth, the farmer, has by this agreement apparently become agent for John Dawson, and is to pay him only \$15.00 when \$575.00 worth of hedge plants are sold; it looks rosy to the farmer, but in reality he has become the victim of a shrewd confidence game.

N. B.—Never try to beat a man at his own game nor sign a paper for an unidentified stranger.

BUSINESS ABBREVIATIONS

AcctAccount	InvtInventory.
AdvtgAdvertising.	$J. \text{ or } Jour. \dots Journal.}$
AgmtAgreement.	J P Journal page. L B Letter Book.
AgtAgent.	L. B Letter Book.
AmtAmount.	lbsPounds.
ArtArticle.	$L. F. \ldots Ledger Folio.$
B. or BkBank.	MdseMerchandise. Memo. or mem. Memorandum.
BalBalance.	Memo. or mem. Memorandum.
BblBarrel.	Mols
B. B Bill-book or	NatNational.
Bank-book.	N. B (Nota Bene) Take
Bank-book. B. Ex Bill of Exchange. B. P. or Bills Pay. Bills Payable.	Notice.
B.P.orBillsPay. Bills Payable.	Notice. Net Without deduc-
B.R.orBillsRec. Bills Receivable.	tion.
Bo'tBought.	O. I. BOutward Invoice
BushBushel.	$P. \text{ or } p. \dots Page.$ [Book.
C. or $C't$ Cent.	PaytPayment.
Cash Cashier.	PdPaid.
C. B Cash Book.	PkgPackage.
Cer Certificate.	Per or prBy the.
ChgdCharged.	Per or prBy the. per ct(Per centum) By the
CkCheck	$P. \& L \dots$ Profit and Loss.
Co Company.	P. & L Profit and Loss.
C. O. DCollect on Delivery.	PrPair.
ComCommission	Prem Premium.
Con. or Const Consignment.	prox (Proximo) The next
Cr Creditor.	month. Piece or Pieces.
Cwt	P. C. P. Dotter Cook Pools
D.B Day Book. $Dep.B$ Deposit Book.	P. C. B Petty Cash Book. Recd Received.
Dep. BDeposit Book. DftDraft.	R. R Railroad.
Dis Discount.	S. B Sales Book.
Do. or $do.$ (Ditto) The same.	S. S Steamship.
DozDozen.	ShiptShipment.
Dr Debtor.	St. Dft Sight Draft.
Ds. or dsDays.	Stg Sterling.
eaEach.	Sunds Sundries
E. E Errors excepted.	Sunds Sundries. Tr. or Trans Transaction.
E. & O. E Errors and omis-	ult(Ultimo) The last
sions excepted.	month.
Ex. or Exch Exchange.	viz(Videlicet) To wit;
Exp Expense.	
fav Favor	vs.
F.B. $E.$	YdsYards.
Exchange. For'dForward.	\$ Dollar.
For'dForward.	c
Ft. or It Foot or Feet.	\pounds
GalGallon.	$d\ldots$.Pence.
GuarGuarantee.	@At, or to.
HdkfHandkerchief.	%Per cent.
HhdHogshead.	% Per cent. Account.
Hund	(Ditto) The same.
I. or Inv Invoice.	#
I. B Invoice Book.	V Check mark.
InsInsurance.	11 One and 1 fourth.
inst (Instant) The pres-	12 One and 2 fourths.
Insol Insolvency.	13. One and 3 fourths. Int. Interest,
Thou Insurvency.	Titte



J. PIERPONT MORGAN

TRUSTS AND MONOPOLIES

The Trusts which dominate the business world of to-day are the legitimate descendants of the old English monopolies.

Definition.—The old time monopolies were grants by the crown securing to one or more persons an exclusive right to carry on some particular branch of trade or manufacture, while the modern trusts are organizations formed by the combination of competing firms, which, independently of any grant of a sovereign or State, exert the right and power of controlling the entire business of the particular branch of trade or manufacture in which they are engaged.

History.—In the sixteenth century the people of England complained of the extortions of the monopolies which had been granted by the crown and the whole system was attacked in Parliament in 1597. No restraining law was passed, because of the personal solicitation of the queen, but in 1601 Parliament took up the subject and a list of the most objectionable monopolies was read in the House of Commons. One member of that body caused a sensation at the time by asking, "Is not bread among the number?"

In 1623 the so-called statute of monopolies was passed, which provided that all monopolies should be illegal, except such as might be granted by Parliament, the only exceptions being the control of new manufactures and inventions. For a time this law put an end to the formation of monopolies, which have now become common under the name of "trusts" in nearly every civilized country of the world.

English Trusts.—In England, despite the industrial energy of the country and its extensive commerce, the trust system has not made the advance it has in some other countries in Europe or in America.

German Trusts.—There are many trusts in Germany. In such industries as brick, stone, plaster of paris, glue, mortar and the like there are about fifty trusts of which a recent writer says: "Of these trusts—in the widest sense of the word—it may be said that by hindering unlimited underbidding they have proved an actual blessing to the trades concerned, without becoming a menace to the public welfare." The same writer says: "The activity and extension of trusts in Germany has not yet led to serious apprehensions or open hatred on the part of large portions of the population, as now appears to exist in the United States. Although aiming primarily at the establishment of better prices, German trusts cannot be accused of the exploitation of the public at large or of the working classes. As regards the establishment of prices, also, the trusts have hitherto displayed a wise moderation."

Russian Trusts.—In Russia, while the courts do not recognize the formation of trusts as legal, strong industrial organizations control many of the commodities. Iron, brandy, sugar, petroleum and a vast number of other products are in the hands of monopolies which oppress the people. Not only is no resistance offered them by the government, but many of them have been organized under the protection and with the assistance of the government.

French Trusts.—Perhaps in no country in Europe has the trust system assumed the proportions it has acquired in France. The iron trade, the chemical industries, the bottle-glass, sugar refining, zinc and many other important lines of industry are controlled by trusts, and have been so for many years.

American Trusts.—In the United States trusts are of comparatively recent origin, but have increased with such rapidity that to-day they outnumber those of all other countries of the world combined. In Moody's Manual of Corporation Securities it is stated that there are in this country about 850 trusts or great industrial combinations, with a total capital of \$9,000,000,000, and that the railroad consolidations would increase this to \$15,000,000,000,000 of outstanding capital.

Besides these gigantic industrial trusts there are innumerable price-fixing and profit-sharing pools in nearly every industry of the country.

Natural Monopolies, such as railroads, street railways, gas, electric light, and water companies, are not classed as trusts, because they are not composed of naturally competing concerns. Consolidations and price and rate-fixing agreements in these industries exist in nearly every city in the country.

Stringent anti-trust acts have been adopted by the general government and most of the States, but owing to the restrictions these acts have experienced at the hands of jurists, most of them have practically become dead letters. The American trusts having the largest capitals are as follows:

A List of Fifteen of the Principal American Trusts

	Location.	Capital.
Amalgamated Copper Co	New York	153,888,000
American Can Co	New York	41,233,300
American Sugar Refining Co	New York	50,000,000
American Smelting & Refining Co.	New York	45,000,000
American Tobacco Co	New York	54,500,000
Continental Tobacco Co	New York	48,846,100
Corn Products Co	New York	44,514,425
Distilling Co. of America	New York	44,596,118
International Harvester Co	Chicago	120,000,000
International Merchant Marine Co	New York	60,000,000
Standard Oil Co	New York	97,500,000
United Copper Co	New York	45,000,000
U. S. Leather Co	New York	62,882,300
U. S. Steel Corporation	New York	08,495,200
Carnegie Co. (Steel, coal, ore. etc.)	Pittsburg1	56,800,000

PARLIAMENTARY RULES AND USAGES

Trace each motion to its respective references and you master at a glance the intricacies of parliamentary usages, comprising some three hundred points of order.

or order.
Forms in which questions may be put
Questions of precedence of questions
Motion to withdraw a motion a. e. g. i. m. n. p.
To take up a question out of its proper ordera. e. g. i. l. n. p.
Motion to take from the tablea. e. g. k. l. n. b.
Motion to suspend the rules
To substitute in the nature of an amendment c. e. h. i. m. n. p.
Motion to make subject a special orderc. e. h. i. l. n. p.



INDEPENDENCE HALL, 1776.

(In the room to the left, on entering the hall, the Declaration of Independence was signed.)

Question whether subject shall be discusseda. e. g. i. l. o. q.
Motion that committee do not risea. e. g. j. m. n. p.
Motion to refer a question
Motion to reconsider an undebatable question a. e. g. j. m. n. r.
Motion to reconsider a debatable question
Reading papers
Questions of privilege
Questions touching priority of business a. e. h. i. m. n. p.
Motion for previous question a. e. g. i. l. n. p.
Motion to postpone indefinitely
Motion to postpone to a definite timed. e. h. i. m. n. p.
Motion for the orders of the day a. e. g. i. m. o. q.
Objection to consideration of question a. e. g. i. l. o. q.
Motion to limit debate on question a. e. h. i. l. n. p.
Motion to lay on the table a. e. g. k. m. n. p

Leave to continue speaking after indecoruma. e. g. i. m. n. p.
Motion to extend limits of debate on question a. e. h. i. m. n. p.
Motion to commit
Motion to close debate on question a. e. h. i. l. n. p
Call to ordera. e. g. i. m. o. q.
Motion to appeal from Speaker's decision generallyc. e. g. i. m. n. q.
Motion to appeal from Speaker's decision re indecorum a. e. h. i. m. n. q.
Motion to amend the rulesc. e. h. 1. l. n. p.
Motion to amend an amendment
Motion to amend
Motion to determine time to which to adjourn b. e. h. i. m. n. p.
Motion to adjourna. e. g. j. m. n. p.

BIGNERS OF THE DECLARATION

OF INDEPENDENCE. John Hancock,
Samuel Adams,
Samuel Adams,
Samuel Adams,
William Whipple,
Mathew Thornton,
William Ellery,
John Hart,
Benjamn Franklin,
Benjamn Franklin,
George Cymer,
James Smith,
George Raylor,
James Wilson,
George Raylor,
James Wilson,
Cawar Rodney,
Thomas Stone,
Charles Carroll,
Richard Henry Lee,
Francis Lightfoot L John Hancock, Carter Braxton, William Hooper, Joseph Hewes, John Penn, Joseph Hewes, John Penn, Button Gwinnett, Lyman Hall, George Walton



INDEPENDENCE HALL, 1876. (Philadelphia, Penn.)

- SIGNERS OF THE DECLARATION OF INDEPENDENCE
- Elbridge Gerry, Stephen Hopkins, Josiah Bartlett, Roger Sherman, Roger Sherman, Francis Lewis, Philip Livingston, William Floyd, Oliver Wolcott, William Williams, Samuel Huntington Samuel Huntingtol Lewis Morris, Richard Stockton, John Witherspoon, F. Hopkinson, A. Clark, Robert Morris, Robert Morris,
 Benjamin Rush,
 Thomas McKeon,
 Samuel Chaee,
 William Pacs,
 George Wythe,
 Thomas Jefferson,
 Benjamin Harrison,
 Thomas Nelson, Jr.
 Edward Rutledge,
 Thomas Hayward, Jr.
 Thomas Lyuch, Jr.
 Arthur Middlefon.
- a. Question undebatable; sometimes remarks tacitly allowed.
- b. Undebatable if another question is before the assembly.
- c. Debatable question.
- d. Limited debate only on propriety of postponement.
- e. Does not allow reference to main question.
- f. Opens the main question to debate.
- g. Cannot be amended.
- h. May be amended.
- i. Can be reconsidered. j. Cannot be reconsidered.
- k. An affirmative vote on this question cannot be reconsidered.
- Requires two-third vote, unless special rules have been enacted.
- m. Simple majority suffices to determine the question.
- n. Motion must be seconded.
- o. Does not require to be seconded.
- p. Not in order when another has the floor.
- q. Always in order, though another may have the floor.

- r. May be moved and entered on the record when another has the floor, but the business then before the assembly may not be put aside. The motion must be made by one who voted with the prevailing side, and on the same day the original vote was taken.
- 1. Fixing the time to which an adjournment may be made; ranks first.
- 2. To adjourn without limitation; second.
- 3. Motion for the Orders of the Day; third,
- 4. Motion to lay on the table; fourth.
- 5. Motion for the previous question; fifth.
- 6. Motion to postpone definitely; sixth.
- 7. Motion to commit; seventh.
- 8. Motion to amend; eighth.
- 9. Motion to postpone indefinitely; ninth.
- 10. On motion to strike out words, "Shall the words stand part of the motion?" unless a majority sustains the words they are struck out.
- 11. On motion for previous question the form to be observed is: "Shall the main question be now put?" This, if carried, ends debate.
- 12. On an appeal from the chair's decision, "Shall the decision be sustained as the ruling of the house?" The chair is generally sustained.
- 13. On motion for Orders of the Day, "Will the house now proceed to the Orders of the Day?" This, if carried, supersedes intervening motions.
- 14. When an objection is raised to considering question, "Shall the question be considered?" objection may be made by any member before debate has commenced, but not subsequently.



COMMERCIAL ARITHMETIC

The object of the following pages is to set forth methods of making some of the calculations which occur in commercial arithmetic with greater rapidity and ease than attend the ordinary methods of making the same calculations. It is impossible to become proficient in arithmetical computations unless the fundamental principles of arithmetic have been fully mastered, and the more thorough this knowledge is, the more serviceable will the following methods prove to be.

ADDITION

Proficiency in addition can be acquired only by practice. There are no contractions by means of which addition may be performed with rapidity and ease. Practice, and practice only, will secure this first requisite of the accountant. However, a few practical suggestions will prove beneficial to those who have acquired but little proficiency in addition.

The Result Method of Addition

Explanation.—Beginning with the lower figure in units column, name the result only of each successive addition; thus 4, 8, 14, 16, 25, 29, 34; then carrying the 3 to the next column add 3, 8, 17, 25, 32, 38, 46, 48.

To Prove.—Add the columns downward. This method lies in the ability to see and combine the result of two or

lies in the ability to see and combine the result of two or more figures without stopping to add each separately.

The Group Method of Addition

54

4227

836

5855

513

484

Explanation.—Beginning at the right add upward, 15, 25, 45; grouping 6, 4, 3 and 2 for 15; grouping 6 and 4 for 10 to add 15, making 25; and grouping 4, 7, 1 and 8 for 20 to add to 25, making 55, the result of first column. Carrying the 4 tens to the second column, adding as before, etc.

To Prove.—Add the columns downward. grouping

To Prove.—Add the columns downward, grouping as illustrated above.

Note.—Practice in grouping will lead to great proficiency, and after one has become skilled in the same, it is advisable to skip about along the column in order to select those numbers which can be most conveniently grouped.

Horizontal Addition

Numbers when written in horizontal order, as in invoices and other business forms, may be added without being rewritten in vertical columns.

In adding numbers written horizontally more care is requisite that the units shall be of like order, and great certainty of correctness can be had by adding first from left to right and then from right to left.

510, 297, 67, 841, 638 = 2,353.

The group method may be employed with equal advantage where numbers are written horizontally.

Horizontal addition is not often practiced with numbers containing more than four or five figures. In adding dollars and cents it is best to omit the dollar sign.

49 2 17

Easy Methods for Adding Lengthy Single and . Double Columns

6 57 4

1

7

37

6

8

Explanation.—Begin at 8 and add as near 20 as possible. thus 8, 6, 3 = 17, reject the tens and place 7 to the right of the last figure added, as in example; begin at 7 and add 7, 1, 4 and 5 = 17, reject the tens, place 7 to the right of 5, begin at 6 and add 6, 7, 2 and 4 = 19. Now adding the figures in the new columns, 7, 7 and 9 = 23 + 3 tens rejected = 53. Ans.

Explanation.—When the columns reach into the hun-9105 dreds, as each hundred is reached note the amount opposite the last figure entering into its sum, as shown in example, and then begin to add again, finally adding these results. The best method of proof is that usually employed by

business men, viz., beginning at the top and adding down the column. If the result is like the first it may be safely assumed to be correct, for the same error, if there were one, would not be likely to occur in the reverse order.

7

9 6

The Civil Service Method of Addition

\$2,974.60		21
8,947.24		28
2,842.11		36
2,976.54		47
7,894.32	-	60
9,874.21		39
5,432.18		
4,567.81		\$45,509.01

Begin at the right and add each column separately; thus the sum of the first column equals 21, the second 28, the third 36, and so on, and then add the results as shown above.

This method is used by civil service employes, bank clerks, and others who handle large sums of money. The advantage lies in the fact that one's attention may be called to other things and yet he is never at a loss to resume work where he left off.

MULTIPLICATION

The following are contractions in multiplication of simple numbers.

- 1. To multiply by 10, 100, etc., annex as many ciphers to the multiplicand as there are in the multiplier.
- 2. To multiply by 5, 50, 500, etc., annex as many ciphers to the multiplicand as there are figures in the multiplier and divide the result by 2.
- 3. To multiply by 25, 250, etc., multiply by 100, 1,000, etc., and divide the result by 4.
- 4. To multiply by any number ending in 9, multiply by the next higher number and then subtract the multiplicand.

Example.—Multiply 83 by 39: $83 \times 40 = 3,320 - 83 = 3,237$.

5. To multiply any number of two figures by 11, write the sum of the two figures between them.

Example.—Multiply 45 by 11: 4+5=9, hence 495. Ans.

6. When the sum of two figures is 10 or over, add the 1 to the left-hand figure.

Example. Multiply 74 by 11: 7+4=11, hence 814.

7. To square any number of 9's. Beginning at the left write 9 as many times less 1 as there are 9's in the given number, an 8, as many ciphers as 9's and 1.

Example.—Square of 99 = 9,801, of 999 = 998,001.

Lightning Methods of Multiplication

To multiply by $1\frac{1}{4}$, divide by 8, call it tens. To multiply by 13, divide by 6, call it tens. To multiply by 2½, divide by 4, call it tens. To multiply by 31, divide by 3, call it tens. To multiply by 61, divide by 16, call it hundreds. To multiply by $8\frac{1}{3}$, divide by 12, call it hundreds. To multiply by 12½, divide by 8, call it hundreds. To multiply by 16%, divide by 6, call it hundreds. To multiply by 25, divide by 4, call it hundreds. To multiply by 31½, divide by 32, call it thousands. To multiply by 331, divide by 3, call it hundreds. To multiply by 50, divide by 2, call it hundreds. To multiply by 663, divide by 15, call it thousands. To multiply by 831, divide by 12, call it thousands. To multiply by 125, divide by 8, call it thousands. To multiply by 1663, divide by 6, call it thousands. To multiply by 250, divide by 4, call it thousands. To multiply by $333\frac{1}{3}$, divide by 3, call it thousands. To multiply by 37½, take ¾ of the number, call it hundreds. To multiply by $87\frac{1}{2}$, take $\frac{7}{8}$ of the number, call it hundreds.

To Multiply Numbers Ending with 5

To multiply two small numbers each of which ends in 5, such as 35 and 75, take the product of the 3 and 7, increase this by one-half the sum of these figures, and prefix the result to 25. Thus,

35
$$5 \times 5 = 25$$

75 $7 \times 3 = 21$, $21 + \frac{1}{2}(7 + 3) = 26$
2,625

To Multiply Any Number by 21, 31, 41, etc.

In multiplying any number by 21, or 31, or 401, or any number of two figures where the last is 1, or of three figures, where the last two figures are 01, a good deal of time can be saved by abbreviating the ordinary process as here illustrated. For 231423 instance, suppose we have to multiply 231423 by 21. 4628460 Instead of putting down 231423 with 21 under it, then drawing a line, multiplying by 1, then by 2 or 20, 4859883 then adding, as is the ordinary custom; all that is necessary is simply to multiply by the 2, placing the product

one figure to the left, and then to add. Try this method, using 31, 51, 61, 91, 201, 3001, and 901 as multipliers. There is a saving in the above example of eight figures.

To Multiply by 9, 99, 999, etc.

It is easier for most people to subtract than to multiply. Instead of multiplying by 9, we multiply by 10 and subtract the number from this product.

$$8759632 \times 9 = 87596320$$

 8759632
 $Product, = 78836688$

To multiply by 99, add two ciphers and subtract; to multiply by 999, add three ciphers and subtract, etc.

The Complement Rule

N. B.—The "complement" of a number is a number which when added to it makes it 100. Thus the complement of 94 is 6, of 98 is 2.

To find the product of two numbers, as 94 and 98, for instance, multiply their complements together, and for the other two figures subtract across, either the 2 from the 94 or the 6 from the 98.

$$98 - 2$$
 $94 - 6$
 9212

Proof of Multiplication in Ten Seconds

Here is a simple *proof* of multiplication which is a modification of the old method of casting out the nines. The *unitate* of a number is the sum of its digits reduced to a unit. Note these examples:

$$24562 = 19 = 10 = 1$$

 $398469 = 39 = 12 = 3$
 $400298 = 23 = 5$

The sum of the digits of the first number is 19; these digits added equal 10, and these added equal 1. Note the following example in multiplication:

$$\begin{array}{c}
252 = 9 \\
321 = 6 \\
252 \\
504 \\
756 \\
80892 = 27 = 9
\end{array}$$

The *unitate* of the multiplier is 9 and the *unitate* of the multiplicand is 6; 6 times 9 equals 54, and the *unitate* of 54 is 9. Now the *unitate* of the product is found to be 9 also, which is a proof of the correctness of the work. Note this example:

It is not necessary to write down as many figures as are written above. The *unitate* of each number can easily be found mentally.

Rapid Multiplication

When the unit figures added equal ten, and the tens are alike, multiply the units and set down the result; add one to either numbers, in ten's place, and multiply by the other, and you have the product.

The three ciphers increase the number to be multiplied one thousand times, or two ciphers one hundred times, and dividing it by the number of times the multiplier is contained in 100 or 1,000 gives the product.

THE NEW MULTIPLICATION TABLE

This Table shows that the large figures in front of each double row are intended to multiply the small head figures in said row; for instance figures in front of each double row are intended to multiply the small head
the large 9 is followed by 2, 3, 4, 5, increase of each, multiplied by 9 times 3 are 27, 9 times 4 are seen at the end of the row; and 6 9 in the last row. 25 times 2 are 50 increase of each, multiplied by 9, namely, 9 times 2 are 61, as will be 9 in the last row. 25 times 2 are 50 increase of each multiplied by 10 times 2 are 50 increase of each multiplied by 10 times 2 are 50 increase of each multiplied by 10 times 2 are 50 increase of each multiplied by 10 times 2 are 50 increase of each multiplied by 10 times 2 are 50 increase of each, multiplied by 10 times 2 are 50 increase of each, multiplied by 10 times 3 are 27, 9 times 4 are 10 times 2 are 50 increase of each, multiplied by 10 times 3 are 27, 9 times 4 are 10 times 2 ti
seen at the end of the row; and etc., and at the end 25 times 4 2 3 4 25 are 625.
5 2 3 4 5 10 15 20 25
6 2 3 4 5 6 12 18 24 30 36
7 2 3 4 5 6 79
2 2 3 4 5 6 7 8 9 2 3 4 5 6 7 8 9
9 2 3 4 5 6 7 8 9 10 10 2 3 4 5 6 7 8 9 10
2 3 4 5 6 7 8 9 10 11
2 33 44 55 66 77 88 99 110 121 2 3 4 5 6 7 8 9 10 11 12
24 36 48 60 72 84 96 108 120 132 144 2 3 4 5 6 7 8 9 10 11 12 13 2 6 39 52 65 78 91 104 117 130 148 156 169
4 2 3 4 5 6 7 8 9 10 11 12 13 14 28 42 56 70 84 98 112 126 140 154 168 182 196
15 2 3 4 5 6 7 8 9 10 11 12 13 14 15 30 45 60 75 90 105 120 135 150 165 180 195 210 225
6 32 48 64 80 96 112 128 144 16) 176 192 208 224 240 256
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 34 51 68 85 102 119 136 153 170 187 204 221 238 255 272 289
18 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 36 54 72 90 108 126 144 162 180 198 216 234 252 270 288 306 324
19 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 38 5776 95 114 133 152 171 190 209 228 247 260 285 304 323 342 361
20 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 40 60 80 100 120 140 160 180 200 270 240 260 280 300 320 340 360 380 400
2 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 42 63 84 105 126 147 168 189 210 231 252 273 294 315 336 357 378 399 420 441
22 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 44 66 88 110 132 154 176 198 220 242 264 286 308 330 352 374 396 418 440 462 484
23 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 46 69 92 115 138 161 184 207 230 253 276 299 322 345 363 391 414 437 460 463 506 529
24 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 48 72 96 120 144 168 192 216 240 264 288 312 336 360 384 409 432 456 480 504 528 552 576
25 \$\frac{2}{5}\$ \$\frac{3}{6}\$ \$\frac{4}{5}\$ \$\frac{6}{6}\$ \$\frac{7}{8}\$ \$\frac{9}{2}\$ \$\frac{10}{12}\$ \$\frac{11}{12}\$ \$\frac{13}{3}\$ \$\frac{14}{4}\$ \$\frac{15}{16}\$ \$\frac{17}{18}\$ \$\frac{19}{425}\$ \$\frac{22}{450}\$ \$\frac{23}{25}\$ \$\frac{24}{25}\$ \$\frac{25}{50}\$ \$\frac{75}{500}\$ \$\frac{25}{525}\$ \$\frac{50}{505}\$ \$\frac{50}{50

To Multiply Mixed Numbers

 Rule.—1. Multiply the whole numbers together. 2. Multiply the upper whole number by the lower fraction 3. Multiply the lower whole number by the upper fraction 4. Multiply the fractions together. 5. Add the four products. 	on. on.
Example.—Multiply 123 by 83.	$12\frac{2}{3} \\ 8\frac{3}{4}$
1. Whole numbers multiplied. 2. Multiply 12 by \(\frac{3}{4}\). 3. Multiply 8 by \(\frac{2}{3}\). 4. Multiply \(\frac{2}{3}\) by \(\frac{4}{4} = 6-12\) or.	$5\frac{1}{3}$
Add results	.1105
To Multiply Two Numbers Having the Same Fraction	ns
Rule.—1. Multiply the whole numbers together. 2. Add the two numbers together and multiply this sum by either one of the fractions. 3. Multiply the two fractions together. 4. Add the results.	$ \begin{array}{r} 9\frac{2}{3} \\ 6\frac{2}{3} \\ \hline 54 \\ 10\frac{4}{9} \\ -\frac{4}{64\frac{4}{9}} \end{array} $

DIVISION

Lightning Methods of Division

To divide by 1½, remove point one place to left, multiply by 8. To divide by 2½, remove point one place to left, multiply by 4. To divide by 8⅓, remove point one place to left, multiply by 3 To divide by 8⅓, remove point two places to left, multiply by 12.

To divide by 12½, remove point two places to left, multiply by 8.

To divide by 16⅔, remove point two places to left, multiply by 6.

To divide by 25, remove point two places to left, multiply by 4.

To divide by 33⅓, remove point two places to left, multiply by 3.

To divide by 50, remove point two places to left, multiply by 2.

To divide by 125, remove point three places to left, multiply by 8.

To divide by 250, remove point three places to left, multiply by 8.

To divide by 250, remove point three places to left, multiply by 8.

To divide by 333\frac{1}{3}, remove point three places to left, multiply by 3.

Tests of Divisibility

Any number is divisible by 2 when the last figure is even; divisible by 4 when the last two figures are divisible by 4; divisible by 5 when the last figure is 0 or 5; divisible by 3 when the sum of its figures is divisible by 3; divisible by 9 when the sum of its figures is divisible by 9.

The product of any three consecutive numbers is divisible by 6; the product of any four consecutive numbers is divisible by 24.

MULTIPLICATION AND DIVISION COMBINED

When it becomes necessary to multiply two or more numbers together, and divide by a third, or by a product of a third and fourth, it must be literally done if the numbers are prime.

For example: Multiply 19 by 13 and divide that product by 7. This must be done at full length, because the numbers are prime; and in all such cases there will result a fraction.

But in actual business the problems are almost all reduceable by short operations; as the prices of articles, or amount called for, always corresponds with some aliquot part of our scale of computation. And when two or more of the numbers are composite numbers, the work can always be contracted.

Example.—Multiply 375 by 7, and divide that product by 21. To obtain the answer, it is sufficient to divide 375 by 3, which gives 125.

The 7 divides the 21, and the factor 3 remains for a divisor. Here it becomes necessary to lay down a plan of operation.

Draw a perpendicular line and place all numbers that are to be multiplied together under each other, on the right-hand side, and all numbers that are divisors under each other, on the lefthand side.

EXAMPLES

Multiply 140 by 36, and divide that product by 84. We place the numbers thus:

$$84 \mid \frac{140}{36}$$

We may cast out equal factors from each side of the line without affecting the result. In this case 12 will divide 84 and 36; then the numbers will stand thus:

But 7 divides 140, and gives 20, which, multiplied by 3, gives 60 for the result.

Multiply 4783 by 39, and divide that product by 13.

Three times 4783 must be the result.

Multiply 80 by 9, that product by 21, and divide the whole by the product of $60 \times 6 \times 14$.

In the above divide 60 and 80 by 20, and 14 and 21 by 7, and those numbers will stand canceled as above, with 3 and 4, 2 and 3, at their sides.

Now, the product $3 \times 6 \times 2$, on the divisor side, is equal to 4 times 9 on the other, and the remaining 3 is the result.

FRACTIONS

The reciprocal of a number is a unit divided by the number. The reciprocal of a fraction is the fraction inverted. To reduce two or more fractions to a common denominator, multiply all the denominators except its own for a new numerator and multiply all the denominators together for a common denominator.

ADDITION OF FRACTIONS

If the fractions have not a common denominator, reduce them to a common denominator, then add the numerators and place the sum over the common denominator.

Add
$$\begin{array}{c} 2 & 3 & 2 & 40 + 45 + 24 & 109 & 49 \\ + & + & - & & -60 & 60 & 60 \\ 3 & 4 & 5 & 0 & 60 & \text{is the common denominator.} \end{array}$$

SUBTRACTION OF FRACTIONS

Reduce the fractions to a common denominator, subtract the numerators and place their difference over the common denominator. Subtract $\frac{2}{3}$ from $\frac{3}{4}$. Here the common denominator is $3 \times 4 = 12$, and the difference of the numerators 1, hence $\frac{1}{10}$ is the answer

MULTIPLICATION OF FRACTIONS

Multiply the numerators for a new numerator and the denominators for a new denominator.

Multiply $\frac{2}{3} \times \frac{3}{4} = \frac{6}{12} = \frac{1}{2}$ the answer. 3×4 is the new denominator, and 2×3 is the new numerator.

DIVISION OF FRACTIONS

Invert the terms of the divisor and proceed as in multiplication.

Inverting the divisor tells how many times the divisor is contained in one, as $\frac{3}{4}$ inverted equals $\frac{4}{3}$, the number of times $\frac{3}{4}$ is contained in 1.

RULES AND EXAMPLES FOR VARIOUS BUSINESS OPERATIONS

Such As: Commission, Discounts, Profit and Loss, Taxes, Insurance, Partial Payments, etc.

COMMISSION

To Find the Commission, the Cost or Selling Price and Per Cent of Commission Being Given

Rule.—Multiply the cost or selling price by the rate per cent of commission.

Example.—How much commission will be due an agent who buys \$9,000 worth of coal on a commission of 5 per cent?

OPERATION

\$9,000 = Investment or base. 0.05 = Per cent of commission.\$450.00 = Commission or percentage.

Explanation.—Since the rate of commission is 5 per cent, the whole commission due the agent will be 5 per cent of the investment, \$9,000, or \$450.

To Find the Investment or Gross Sales, the Commission and Per Cent of Commission Being Given

Rule.—Divide the commission by the rate per cent of commission.

Example.—If an agent's rate of commission is 3 per cent, what value of goods must be sell to earn a commission of \$75?

$$3\% = .03 \mid \begin{array}{c} \text{Com.} \\ \$75.00 \\ \hline \$2.500 \end{array}$$

Explanation.—Since the agent's commission is 3 per cent, he earns 3 cents by selling \$1 worth of goods; the value of the

goods sold, therefore, must be as many times \$1 as 3 cents is contained times in \$75, which is 2,500 times, and 2,500 times \$1 is \$2,500.

To Find the Investment and Commission When Both are Included in a Remittance by the Principal

Rule.—Divide the remittance by 1 plus the rate per cent of commission.

Example.—If \$1,050 is sent to a Syracuse agent for the purchase of salt, how much will he invest, his rate of commission being 5 per cent?

OPERATION

\$1.00 = Investment.

\$1.05)\$1,050

.05 = Commission.

\$1,000, Sum invested

\$1.05 = Actual cost to principal of each

in salt.

dollar invested by agent.

Explanation.—For each dollar invested the principal supplies the dollar invested and 5 cents for the agent's services, therefore the agent will invest only as many dollars in salt as \$1 plus 5 cents, or \$1.05, is contained times in \$1,050, or 1,000 times, hence the investment \$1,000.

DISCOUNTS

Discount is the allowance made from the amount of a debt, a note, or other obligation, or a deduction from the price of goods for payment before it is due.

Trade Discount is the allowance made by manufacturers and merchants upon their fixed or list prices.

When there is more than one trade discount they are known as discount series.

Trade discount is computed by the rules of percentage on the market price as a base. When a series of discounts is allowed, the first only is so computed, and in every subsequent discount the remainder after each preceding discount is regarded as the base.

To Find the Selling Price, the List Price and Discount Series Being Given

Example.—The list price of a carriage is \$250, what is the net selling price, if a discount of 40 per cent is allowed?

OPERATION

\$250 = List price.	\$250 = Cost.
.40 = Per cent of discount.	100 = Discount.
\$100.00 = Discount.	\$150 = Net selling price.

Explanation.—Since the discount is 40 per cent and the list price or base is \$250, the discount to be deducted will be 40 per cent, or \$100. The net price will be \$250 - \$100 = \$150.

True Discount

True Discount is the difference between the face of a debt due at a future time and its present worth.

The Present Worth of a debt payable at a future time without interest is its value *now*; hence is such a sum as being put at simple interest at the legal rate will amount to the given debt when it becomes due.

To Find the Present Worth and True Discount

Example.—Find the present worth and true discount of a claim for \$871.68 due 2 years 3 months hence, at 6 per cent per annum.

OPERATION

```
$ .135 = Interest on $1 for 2 yrs. 3 mo. at 6 per cent.

1.135 = \text{Amount}.

871.58 \div 1.135 = \$768, present worth.

871.68 - \$768 = \$103.68, true discount.
```

Explanation —The amount of the debt at the end of 2 years 3 months is \$871.68, and since \$1 would in that time at 6 per cent amount to \$1 135, the present worth must be as many times \$1 as \$1.135 is contained times in \$871.68, or \$768. If the face is \$871.68 and its present worth is only \$768, the true discount will be \$871.68 minus \$768, or \$103.68.

Rule.—Divide the amount of the debt at its maturity by one dollar plus its interest for the given time and rate and the quotient will be the present worth. Subtract the present worth from the amount and the remainder will be the true discount.

Bank Discount

Bank Discount is a deduction from the sum due upon a negotiable paper at its maturity for the cashing or buying of such paper before it becomes due.

The discount may be a fixed sum, but is usually the interest at the legal rate taken in advance. Bank discount is usually reckoned on a basis of 360 days a year.

The time in bank discount is always the number of days from the date of discounting to the date of maturity.

The term of discount is the time the note has to run after being discounted.

Notes containing an interest clause will bear interest from date to maturity unless other time be specified.

Non-Interest Bearing Notes become interest bearing if not paid at maturity.

The maturity of a note or draft is indicated by using a short vertical line with the date on which the note or draft is nominally due on the left and the date of maturity on the right; thus, Nov. 21—24.

To Find the Discount and Proceeds, the Face of a Note, Time and Rate Per Cent of Discount Being Given

Example.—Find the bank discount and proceeds of a note for \$580 due in 63 days at 6 per cent.

OPERATION

\$580.00 = Face. 6.09 = Discount for 63 days. \$573.91 = Proceeds.

Explanation.—The bank discount of a note being its interest for the time plus grace and the proceeds being the face of a note minus the bank discount, it is only necessary to compute the interest on the face for the full time to obtain the discount and to subtract such discount from the face to find the proceeds; thus, \$6.09 being the discount, \$580 minus \$6.09 equals \$573.91 proceeds.

Rule.—Compute the interest for the time and rate for the bank discount, and subtract this bank discount from the face of the note to find the proceeds.

To Find the Face of a Note, the Proceeds, Time and Rate Per Cent of Discount Being Given

Example.—What must be the face of a note, payable in 60 days, that when discounted at 6 per cent the proceeds may be \$573.91?

OPERATION

\$1.00 = Face of note of \$1. .0105 = Discount of note of \$1. .9895 = Proceeds of note of \$1. $\$573.91 \div .9895$ = \$580 face required.

Explanation.—If the discount of \$1 at 6 per cent for 63 days is \$.0105, the proceeds of \$1 of the note would be \$1 minus \$.0105, or \$.9895, and if the proceeds of \$1 are \$\$.9895 it would require as many dollars face of note to give \$573.91 as \$.9895 are contained times in \$573.91, or \$580.

Rule.—Divide the proceeds of a note by the proceeds of one dollar for the given rate and time.

PROFIT AND LOSS

Profit and Loss treats of gains or losses in business transactions.

The gross or full cost of an article is its first cost increased by all outlays incident to its purchase and holding to date of sale.

The Net Selling Price is the gross selling price, less all charges incident to its sale.

To Find the Profit and Loss, the Cost and Rate Being Given.

Example.—An agent paid \$95 for a reaper and sold it at a profit of 18 per cent. What was his gain?

OPERATION

\$95.00 = Cost.

.18 = Per cent of gain.

\$17.10 = Gain.

Explanation.—Since the agent gained 18 per cent or 18 cents on \$1, on the \$95 of cost he would gain 95 times \$.18, or \$17.10.

Rule.—Multiply the cost by the rate.

To Find the Cost, the Gain or Loss and the Rate of Gain or Loss Being Given

Rule.—Divide the gain or loss by the per cent of gain or loss.

To Find the Rate of Profit or Loss, the Cost and the Profit or Loss Being Given

Rule.—Divide the profit or loss by the cost.

To Find the Cost, the Selling Price and the Rate Per Cent of Profit or Loss Being Given

Rules.—Divide the selling price by 1 plus the rate of gain. Divide the selling price by 1 minus the rate of loss.

TAXES

To Find a Property Tax

Example.—The rate of taxation in the city of Des Moines, Iowa, is 13. What amount of tax must a person pay, whose personal property is valued at \$17,500, and who owns real estate assessed at \$24,900?

 $$17,500 \\ 24,900$

 $$42,400 \times .01\frac{3}{4} = $742.$

Explanation.—Since his total valuation was \$42,400, and the rate of taxation $1\frac{3}{4}$ per cent, his tax would be $1\frac{3}{4}$ per cent of \$42,400, or \$742.

Rule.—Multiply the total assessed value by the rate per cent of taxation.

INSURANCE

To Find the Cost of Insurance

Example.—The stock in a store is insured for \$750. What is the cost of insurance for one year at $1\frac{1}{2}$ per cent premium if \$1.25 is charged for the policy?

OPERATION

\$750 = Amount insured.

.015 = Per cent of premium.

\$11.25 = Premium.

1.25 = Cost of policy.

\$12.50 = Full cost of insurance.

Explanation.—Since the amount insured is the base, and the per cent of premium the rate, if the amount is multiplied by the rate the product, \$11.25, will be the premium; adding \$1.25, cost of policy = \$12.50, the full cost.

Rule.—Multiply the amount of insurance by the rate per cent of premium, and add extra charges, if any.

To Find the Amount Insured, the Premium and Per Cent of Premium Being Given

Rule.—From the full cost of insurance subtract the extra charges, if any; divide the remainder by the per cent of premium, and the quotient will be the face of the policy.

INTEREST

Legal Points Concerning Interest

- 1. Interest is money paid for the use of money. If one borrows money promising to repay it with an additional amount, the sum borrowed is called the *principal*, the additional amount *interest*. It is usually stated as so much per cent, i.e., so many dollars of interest for every hundred dollars of principal.
- 2. When Allowed.—Interest is allowed (1) when it is expressly contracted for, (2) when such an agreement is implied, (3) when a debt has become due but remains unpaid.

The most common instance in the first class is where money is borrowed. The debtor usually expressly agrees to pay the debt and interest.

The second class is where money is borrowed and the agreement to pay interest is implied from the nature of the business or the usual custom.

The third class relates to the interest accruing after the debt becomes due, and it is a general rule that one who fails to pay money due must also pay interest upon it up to the time he does pay.

- 3. Usury.—Many of the States forbid any one to give or receive more than a stated rate of interest. This rate differs in the different States, varying from 6 to 12 per cent. The taking of a higher rate than that allowed by the law is usury; thus usury is unlawful interest.
- 4. Legal Rate.—Every State has established a certain rate which shall be the rate of interest in all those cases where the parties have not fixed their own rate. This is called the *legal rate*, and in most States it is 6 per cent per annum. See *Interest Laws and Statutes of Limitation*.

A promise to "pay \$100 and interest" means interest at the legal rate of the State in which the payment is to be made.

5. **Penalty of Usury.**—Some penalty is inflicted upon the one who takes usury, i.e., upon the lender, not upon the borrower. It varies in the different States, but is usually one of three kinds: (1) the forfeiture of the usurious interest, i.e., all above the lawful rate; (2) the forfeiture of all the interest; or (3) the forfeiture of both principal and interest.

In a State where the first rule is adopted, the lender who has lent at an usurious rate may recover the principal and interest at the legal rate; where the second is adopted only the money he lent; and where the third is adopted not even that. See *Interest Laws*.

- 6. Book Accounts.—Interest may be charged on book accounts, when it is known to the customer that it is a common practice of the seller to charge interest; but not until the statement is rendered.
- 7. Judgments.—Interest upon a judgment dates from the time the judgment was rendered. Debts for board and lodging, where there was no price or time of payment fixed, will not draw interest until they are reduced to judgments.
- 8. Administrators, Executors, Guardians and Trustees may be charged interest upon all trust funds in their hands after their failure to invest them within a reasonable time.
- 9. Copartnership.—If a partner withdraws money from the funds belonging to the firm, for private use, he will be liable for interest on the same.
- 10. Policy of Insurance.—If loss occurs under a policy of insurance, it bears interest from the time it is due according to the terms of the policy.
- 11. Compound interest is not collectible by law. When interest has accumulated and become payable, an agreement that it shall be added to the principal thus formed will usually be deemed legal.

Lightning Method for Calculating Interest

This is probably the shortest and simplest method known. Multiply the principal by the number of days, and

For	4	per	cent,	divide	by	90
66	5	-	66	6.6	66	72
66	6		6.6	4.6	6 6	60
66	7		6.6	6 6	46	52
6 6	8		6.6	6 6	66	45
66	9		6.6	6.6	66-	40
66	10		6.6	4.6	66	36
66	12		66	6.6	66	30

Example.—What is the interest on \$450 for 1 month and 10 days at 8 per cent?

Solution. $-450 \times 40 \div 45 = \4.00 . Ans. Interest.

BANKERS' METHOD

To Find the Interest on Any Sum at 6 Per Cent for Any Number of Days

Rule.—Remove the decimal point two places to the left, and you have the interest for 60 days.

Example.—What is the interest on \$250 for 60 days at 6 per cent?

Principal, \$250. Interest, \$2.50.

When the time is more or less than 60 days, first find the interest for 60 days, and from that to the time required.

For 120 days, multiply by 2
$$\frac{90}{100}$$
 $\frac{90}{100}$ $\frac{30}{100}$ \frac

What is the interest on \$720 for 75 days at 6 per cent?

Cancelation Method

Rule.—Place the principal, the rate, and the time in months, on the right of a vertical line, and 12 on the left; or, if the time is short and contains days, reduce to days, and place 360 on the left. After canceling equal factors on both sides of the line, the product of the remaining factors on the right, divided by the factor, if any, on the left, will give the required interest.

To find the interest of \$184.80 for 1 year 5 months at 5 per cent.

$$\frac{12}{17} \frac{ \begin{bmatrix} \$1\$4.\$9 \\ .05 \\ .17 \\ \$18.09 \end{bmatrix} Ans. }{ 17}$$

Analysis.— $$184.80 \times .05$ gives the interest for 1 year or 12 months, which divided by 12 gives the interest for 1 month; the quotient multiplied by 17, the number of months in 1 year 5 months, gives \$13.09, the interest required.

To find the interest of \$240 for 2 months 18 days at 7 per cent.

$$\begin{array}{c} \text{OPERATION} \\ \$240^{6} \\ .07 \\ \hline 3 \\ \hline 3 \\ \hline \$10.92 \\ \hline \$3.64, \, Ans. \end{array}$$

Analysis.— $$240 \times .07$ gives the interest for 1 year or 360 days, which divided by 360 gives the interest for 1 day; the quotient multiplied by 78, the number of days in 2 months 18 days, gives \$3.64, the required interest.

To find the interest of \$696 for 93 days at 1 per cent a month.

Of \$325.20 at $\frac{3}{4}$ per cent a month for 63 days.

	OPERATION			OPERATION
	\$696348		1	\$325.208.10
5	.12			.09
10360	9331		40360	63
5	\$107.88			\$5.121, Ans.
	\$21.576. Ans.			

INTEREST TABLES.

IN the following interest tables, interest is computed to mills to insure greater accuracy.

The interest at any other rate can easily be found. Interest at 4 per cent is ½ of interest at 8 per cent. Double interest at 5 per cent and you have interest at 10 per cent, etc.

The interest is given in hundreds of dollars. To find the interest on \$10, \$20, etc., move decimal point one place to the left. To find interest on \$1, \$2, etc., move decimal point two places to the left.

EXAMPLE:

FIND THE INTEREST ON \$165 FOR ONE YEAR FIVE MONTHS SIXTEEN DAYS AT FIVE PER CENT.

Interest	on	\$1 00	for	one	year	0.0.5%			٠.	• • •	• • •	 	\$5.00
6'6	û	60	6.6	6.6	"							 	8.00
46	6.8	5	44	4.6	"		• • •					 	.25
68	66	100	44	five	month	ıs		٠			•••	 	2.08
61	8.6	60	6,8	46	44							 	1.25
4 k	44,	5	4.6	6.6	44							 	.10
66 -	66	100	,64,	sixt	een da	ys .	•••					 	.22
	4.6												.13
66.	ı i	5	4.6	10			•••	• • •		• • •		 	.01

INTEREST AT FIVE PER CENT.

Days.	\$100	\$200	\$300	\$400	\$500	\$600	\$700	\$800	\$900
-									
1	.014	.028	.042	.056	.069	.083	.097	.111	.125
2	.028	.056	.042	.111	.139	.167	.194	222	.123
3	.042	.083	.125	167	208		.291	.333	.375
4	.056	.111	.167	222	278		.389		.500
5	.069	.139	.208		347	417	.486	.556	.625
6	.083	.167	.250		417		.583		.750
7	.097	.194	.291	.389	.486		.681	.778	.875
8	.111	.222	.333	.414	.556		.778		1.000
9	.125	.250	.375	.500	.625	.750	.875	1.000	1.125
10	.139	.278	.417	.556	.694	.833	.972	1.111	1.250
11 12	.153	.306	.459	.611	.764	.917	1.069	1.222	1.375
13	.167	.333	.500	.667	.833	1.000	1.167	1.333	1.500
14	.180 .194	.361	,542	.722	$-\frac{903}{971}$	1.083	1.264 1.361	1.444 1.556	1.625 1.750
15	.208	.389	.583 .625	.778 .833	1,041	1.167 1.250	1.458		1.875
16	.222	444	.667	.889	1.111	1.333	1.555	1.778	2.000
17	.236	.472	.708	.944	1.180	1.417	1.653	1.889	2.125
18	.250	500	.750	1.000	1.250	1.500	1.750	2.000	2.250
19	.264	.528	792	1:056	1.319	1.583	1.847	[2.111]	2.375
20	.278	.556	.833	1.111	1.389	1.667	1.944	2.222	2.500
21	.291	.583	.875	1.167	1.458	1.750	2.041	2.333	2.625
22 23	.305	.611	.917	1.222	1.528	1.833	2.138	2.444	2.750
24	.319	.639	.959	1.278	1.597	1.917	2.236	2.556	2.875
25	.333	.667	1.000	1.333	1.667	2.000	2.333	2.667	3.000
26	.347	694 722	$1.042 \\ 1.083$	1.389 1.444	1.736 1.805	$2.083 \\ 2.167$	2.430 2.528	2.778 2.889	3.125
27	.375	750	1.125	1.500	1.875	2.107	$\frac{2.526}{2.625}$	3.000	3.250
28	389	778	1.167	1.556	1.944	2.333	$\frac{2.025}{2.722}$	3.111	3.500
29	.403	.806	1.208	1.611	2.014		2.820	3.222	3.625
Mos.									
1	.417	.833	1.250		2.083		2.917	3.333	3.750
2 3	.833	1.667	2.500		4.167		5.833	6.667	7.500
4	1.250 1.667	2.500 3. 3 33	3.750 5.000	$\begin{bmatrix} 5.000 \\ 6.667 \end{bmatrix}$	6.250	$7.500 \\ 10.000$		10.000	
5	2.083	4.167	6.250		10 416	12.500	14 583	16,667	18 750
6	2.500	5.000		10 000	12 500	15.000	17 500	20 000	22 500
6	2.917	5.833				17.500			
8	3.333	6.667	10.000	13.333	16.667	20.000	23.333	26.667	30.000
9	3.750	7.500	11.250	15.000	18.750	22.500	26.250	30:000	33.750
10	4.167	8.333	12.500	16.667	20.833	25.000	29.167	33.333	37.500
11	4.583	9.167	13.750	18.333	22.917	27,500	32.083	36.667	41.250
Year 1	5.000	10.000	15 000	20, 000	25 000	30 000	25 000	40,000	15 000
	3.000	10.000	19.000	4,0,000	20.000	39,000	20.000	40.000	

INTEREST AT SIX PER CENT.

===									
Days.	\$100	\$200	\$300	\$400	\$500	\$600	\$700	\$800	\$900
1 2 3 4	.017 .033 .050	.033 .067 .100	.050 .100 .150 .200	.067 .133 .200 .267	.083 .167 .250	.100 .200 .300 .400	.117 .233 .350 .467	.133 .267 .400	.150 .300 .450 .600
4 5 6 7 8	.083 .100 .117 .133	.167 .200 .233 .267	.250 .300 .350 .400	.333 .400 .467 .533	.417 .500 .583 .667	.500 .600 .700 .800	.583 .700 .817 .933	.667 .800 .933 1 .067	.750 .900 1.050 1.200
9 10 11 12 13	.150 .167 .183 .200 .217	.300 .333 .367 :400 .433	.450 .500 .550 .600	.600 .667 .733 .800 .867	.750 .833 .917 1.000 1.083	$ \begin{array}{c c} .900 \\ 1.000 \\ 1.100 \\ 1.200 \\ 1.300 \end{array} $	1.050 1.167 1.283 1.400 1.517	$egin{array}{c} 1.200 \\ 1.333 \\ 1.467 \\ 1.600 \\ 1.733 \end{array}$	1.350 1.500 1.650 1.800 1.950
14 15 16 17	.233 .250 .267 .283	.467 .500 .533 .567	.700 .750 .800 .850	.933 1.000 1.067 1.133	1.167 1.250 1.333 1.417	$\begin{bmatrix} 1.400 \\ 1.500 \\ 1.600 \\ 1.700 \end{bmatrix}$	1.633 1.750 1.867 1.983	1.867 2.000 2.133 2.267	2.100 2 250 2.400 2.550
18 19 20 21 22	.300 .317 .333 .350 367	.600 .633 .667 .700	.900 .950 1.000 1.050 1.100	1.200 1.267 1.333 1.400 1.467	1.500 1.583 1.667 1.750 1.833	1.800 1.900 2.000 2.100	$egin{array}{c} 2.100 \\ 2.217 \\ 2.333 \\ 2.450 \\ 2.567 \end{array}$	2.400 2.533 2.667 2.800 2.933	2.850 3.000 3.150
23 24 25 26	.383 .400 .417 .433	.767 .800 .833 .867	1.150 1.200 1.250 1.300	1.533 1.600 1.667 1.733	$\begin{bmatrix} 1.917 \\ 2.000 \\ 2.083 \end{bmatrix}$	$\begin{bmatrix} 2.200 \\ 2.300 \\ 2.400 \\ 2.500 \\ 2.600 \end{bmatrix}$	2.683 2.800 2.917 3.033	3.067 3.200 3.333	$\frac{3.450}{3.600}$
27 28 29 Mos.	.450 .467 .483	.900 .933 .967	1.350 1.400 1.450	1.800 1.867 1.933	2.250 2.333 2.417.	2.700 2.800 2.900	3.150 3.267 3.383	3.600 3.733 3.867	4.050 4.200 4.350
1 2 3 4 5	.500 1.000 1.500 2.000 2.500	1.000 2.000 3.000 4.000 5.000	1.500 3.000 4.500 6.000 7.500	6.000 8.000	5.000 7.500 10.000	6.000 9.000 12.000	10.500 14.000	$\begin{vmatrix} 8.000 \\ 12.000 \\ 16.000 \end{vmatrix}$	
6 7 8 9	3.000 3.500 4.000 4.500	6.000 7.000 8.000 9.000	9.000 10.500 12.000 13.500	12.000 14.000 16.000 18.000	15.000 17.500 20.000 22.500	$18.000 \\ 21.000 \\ 24.000 \\ 27.000$	21.000 24.500 28.000 31.500	$24.000 \\ 28.000 \\ 32.000 \\ 36.000$	27.000 31.500 36.000 40.500
10 11 Year. 1	5.000 5.500	10.000 11.000	16.500	22.000	27.500	33.000	38.500	44.000	45.000 49.500 54.000

INTEREST AT SEVEN PER CENT.

		1		1	1	1			
Days.	\$100	\$200	\$300	\$400	\$500	\$600	\$700	\$800	\$900
1	.019	.039	.058	.078	.097	.117	.136	.156	.175
2	.039	.078	.117	.156	.194	.233	.130	.311	350
3	.058	.117	.175		.194	.350	.408	.467	.525
4	.038	.156	.233	.311	.292			.622	.700
5		.194	900	.911			.544		
0	.097	.194	.292		.486		.681	.778	.875
6	.117		.350		.583		.817	.933	1.050
	.136	.272	.408		.681	.817	.953	1.089	1.225
8	.156	.311	.467	.622	.778		1.089	1.244	1.400
9	.175	.350	.525	.700	.875	1.050	1.225	1.400	1.575
10	.194	.389	.583		.972	1.167	1.361	1.556	1.750
11	.214	.428	.642	.856	1.069	1.283	1.497	1.711	1.925
12	.233	.467	.700		1.167	1.400	1.633	1.867	2.100
13	.253	.506	.758	1.011	1.264		1.769	2.022	2.275
14	.272	.544	.817	1.089	1.361	1.633	1.906	2.178	2.450
15	.292	.583	.875		1.458		2.042	2.333	
16	.311	.622	.933	1.244	1.556	1.867	2.178	2.489	2.800
17	.331	.661	.992	1.322	1.653		2.314	2.644	2.975
18	.350	.700	1.050	1.400	1.750	2.100	2.450	2.800	3.150
19	.369	.739	1.108		1.847	2.217	2.586	2.956	3.325
20	.389	.778	1.167	1.556	1.944	2.333	2.722	3.111	3.500
21	.408	.817	1.225	1.633	2.042	2.450	2.858	3.267	3.675
22	.428	.856	1.283	1.711	2.139	2.567	2.994	3,422	3.850
23 24	.447	.894	1.342	1.789	2.236	2.683	3.131	3.578	4.025
25	.467	.933	1.400	1.867	2.333	2.800	3.267	3.733	4.200
	.486	.972	1.458	1.944	2.431	2.917	3.403	3.889	4.375
26 27	.506	1.011	1.517	2.022	2.528	3.033	3.539	4.044	4.550
28	.525	1.050	1.575	2.100	2.625	3.150	3.675	4.200	4.725
29	.564	1.089 1.128	1.633	2.178 2.256		3.267	3.811	4.356	4.900
Mos.	.004	1.120	1.692	4.200	2.819	3.383	3.947	4.511	5.075
1	.583	1.167	1.750	2.333	2.917	3.500	4.083	4.667	5.250
$\bar{2}$	1.167	2.333	3.500		5.833				10.500
3	1.750	3.500	5.250			10.500	12 250		
4	2.333	4.667	7.000	9.333	11.667	14.000	16.333	18 667	21 000
5	2.917	5.833		11.667	14.583	17.500	20.417	23 333	26 250
6	3.500	7.000	10,500	14.000	17.500	21.000	24.500	28.000	31 500
7	4.083	8.167	12.250	16.333	20.417	24.500	28.583	32.667	36 750
8	4.667	9.333	14.000	18.667	23.333	28.000	32.667	37 333	42 000
9	5.250	10.500	15.750	21.000	26.250	31.500	36,750	42.000	47.250
10	5.833	11.667	17,500	23.333	29.167	35.000	40.833	46.667	52.500
11	6.417	12.833	19,250	25.667	32.083	38.500	44.917	51.333	57.750
Year									
1]	7.000	14.000	21.000	[28.000]	35.000	42.000	49.000	56.000	63.000
1									

INTEREST AT EIGHT PER CENT.

Days.	\$100	\$200	\$300	\$400	\$500	\$600	\$700	\$800	\$900
1	.022	.044	.067	.089	.111	.133	.156	.178	.200
2	.044	.089	.133	.178	.222	.267	.311	.356	.400
3	.067	.133	.200	.267	.333	.400	.467	.533	.600
2 3 4 5	.089	.178	.267	. 356	.444	.533	.622	.711	.800
5	.111	.222	.333	.444	.556	.667	.778	.889	1.000
7	.133	.267	.400	.533	.667	.800	.933	$1.067 \\ 1.244$	1,200
.8	.156	.311	.467 $.533$.622	.778 .889	$\frac{.933}{1.067}$	1.089 1.244	1.422	1.600
9	.200	.400	.600	.800	1.000	1.200	1.400	1.600	1.800
10	222	.444	.667	.889	1.111	1.333	1.556	1.778	2.000
11	.244	.489	.733	.978	1.222	1.467	1.711	1.956	2.200
12	.267	.533	.800	1.067	.1.333	1.600	1.867	2.133	2.400
13	.289	.578	.867	1.156	1.444	1.733	2.022	2.311	2.600
14	.311	.622	.933	1.244	1.556	1.867	2.178	2.489	2.800
15 16	.333	.667	1.000	1.333 1.422	1.667	$\frac{2.000}{2.133}$	2.333 2.489	2.667 2.844	3.000 3.200
17	.356 $.378$.711 .756	1.067 1.133	1.511	1.778 1.889	$\frac{2.133}{2.267}$	2.644	3.022	3.400
18	.400	.800	1.200	1.600	2.000	2.400	2.800	3.200	3.600
19	.422	.844	1.267	1.689	2.111	2.533	2.956	3.378	3.800
20	.444	.889	1.333	1.778	2.222	2.667	3.111	3.556	4.000
21	.467	.933	1.400	1.867	2.333	2.800	3.267	3.733	
22	.489	.978	1.467	1.956	2.444	2.933	3.422	3.911	4.400
23	.511	1.022	1.533	2.044	2.556	$\frac{3.067}{3.200}$	3.578	$\begin{vmatrix} 4.089 \\ 4.267 \end{vmatrix}$	4.600
24 25	.533 .556	1.067 1.111	$1.600 \\ 1.667$	$2.133 \\ 2.222$	2.667 2.778	$\frac{3.200}{3.333}$	3.733 3.889	4.444	
26	.578	1.156	1.733	2.311	2.889	3.467	4.044	4.622	
27	.600	1.200	1.800	2.400		3.600		4.800	
28	.622	1.244	1.867	2.489		3.733	4.356	4.978	
29	.644	1.289	1.933	2.578	3.222	3.867	4.511	5.156	5.800
Mos.	007	1 000	0.000	0 007	2 222	4.000	4.667	5:333	6.000
2	.667 1.333	$\begin{bmatrix} 1.333 \\ 2.667 \end{bmatrix}$	$\frac{2.000}{4.000}$			8.000	9 333		12.000
3	2.000		6 000	8.000	10.000	12.000	14,000	16.000	18,000
4	2.667	5.333	8.000	10.667	13.333	16.000	18.667	21.333	24.000
5	3.333	6.667	10.000	13.333	16.667	20.000	23.333	26.667	30.000
6	4.000	8.000	12.000	16.000	20.000	24.000	28.000	32.000	36.000
7.	4.667	9.333	14 000	18.667	23.333	28.000	32.667	37.333	42.000
8	5.333	10.667	16.000	21.333	26.667	32.000	37.333	42.667	48.000
9	6.000	12.000	18.000	24.000	$\frac{30.000}{33.333}$	40.000	42.000	53 333	60 000
10 11	7 322	14 667	20.000	20.007	36.667	44 000	51 333	58.667	66.000
Year.	į.	l .	1	1	1	1	1	1	}
1	8.000	16.000	24.000	32.000	40.000	48.000	56.000	64.000	72.000
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POSSIBILITIES OF COMPOUND INTEREST

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153.00 194.16 236.55 280.23 325.26 371.64 419.40 204.00 258.88 315.40 373.64 433.68 495.52 559.20 255.00 383.20 344.25 467.05 542.10 619.40 699.00 357.00 383.20 374.25 467.16 699.00 478.80 408.00 517.76 630.80 747.28 867.36 991.04 1118.40 459.00 582.48 709.65 840.69 975.78 1114.92 1258.20 510.00 647.20 788.50 934.10 1084.20 1378.00 1378.00 561.00 776.44 946.35 1120.94 1118.49 1258.20 1578.00 662.00 776.44 946.35 1120.94 1118.40 1378.00 1578.00 662.00 776.44 946.35 1120.94 1118.40 1378.00 1677.00 714.00 906.08 1103.90 1307.74 151.20 152.20 2097.00	24.38 49.50 7		75.34	102.00	129.44	157.70	186.82	216.84	247.76	279.60	\$2
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255.00 323.60 394.25 467.05 542.10 619.40 699.00 306.00 388.32 473.10 560.46 650.52 743.28 838.80 357.00 453.04 851.95 653.87 758.48 877.16 978.60 459.00 582.48 709.65 840.69 975.78 1114.92 1258.20 561.00 647.20 788.50 934.10 1084.20 1328.60 1398.00 561.00 711.92 867.35 1120.92 130.04 1486.56 1677.60 663.00 775.64 946.20 1120.92 130.04 1486.56 1677.60 765.00 776.64 946.20 1120.92 130.04 1486.56 1677.60 765.00 940.06 1120.30 120.44 157.08 177.00 765.00 970.80 1182.75 140.15 162.63 182.06 2376.60 867.00 1100.24 1340.45 1843.14 2105.96 2376.60	48.76 99.00 15		150.68	204.00	258.88	315.40	373.64	433.68	495.52	559.20	\$4
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510.00 647.20 788.50 934.10 1084.20 1238.60 1398.00 561.00 711.92 867.35 1027.51 1192.62 1362.68 1537.80 612.00 776.46 946.35 1120.95 130.04 1486.56 1677.60 66.20 841.36 1025.65 1214.33 1409.46 1617.40 1877.60 765.00 970.80 1182.75 1401.15 1626.30 1858.20 2097.00 816.00 1005.52 1261.60 1494.56 1734.72 1982.08 235.60 867.00 1100.24 1340.45 1587.97 1843.14 2105.96 2376.60 969.00 1164.96 1419.30 1681.38 1951.56 2229.84 2516.40 969.00 1229.68 1499.15 1774.79 2059.98 2353.72 2656.20 1020.00 1294.40 1577.00 2168.40 2477.60 2796.00	109.71 222.75 339.03		03	459.00	582.48	709.65	840 69	975.78	1114.92	1258.20	88
561.00 711.92 867.35 1027.51 1192.62 1362.66 1537.80 612.00 776.64 946.20 1120.92 1301.04 1486.56 1677.60 663.00 841.36 1025.02 13101.04 186.56 1677.60 765.00 970.80 1103.90 1307.74 1517.88 1734.32 1957.20 867.00 1005.52 1261.60 1494.56 1734.72 1982.08 235.80 867.00 1100.24 1340.45 1843.14 2105.96 2376.60 918.00 164.96 1419.30 1681.38 1951.56 2229.84 2516.40 969.00 1229.68 1499.15 1774.79 2059.98 2333.72 2656.20 1020.00 1294.40 1577.00 1868.20 21776.00 2796.00	121.90 247.50 376.70		2	510.00	647.20	788.50	934.10	1084.20	1238.80	1398.00	810
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663.00 841.36 1025.05 1214.33 1409.46 1610.44 1817.40 714.00 906.08 1103.90 1307.74 1517.88 1734.32 1957.20 765.00 970.80 1182.75 1401.15 1626.30 1858.20 2097.00 816.00 10035.52 1261.60 1494.56 1734.72 1982.08 2336.80 918.00 1100.24 1340.45 1887.97 1843.14 2105.96 2376.60 918.00 1164.96 1419.30 1601.38 1951.56 2259.84 2316.40 969.00 1229.68 1498.15 1774.79 2059.96 2353.72 2656.20 1020.00 1294.40 1577.00 1868.20 2168.40 2477.60 2796.00			94	612.00	776.64	946.20	1120.92	1301.04	1486.56	1677.60	812
714.00 906.08 1103.90 1307.74 1517.88 1734.32 1957.20 765.00 970.80 1182.75 1401.15 1626.30 1858.20 2097.00 816.00 1035.52 1261.60 1494.56 1734.72 1982.08 2236.80 867.00 1100.24 1340.45 1887.97 1843.14 2105.96 2376.60 918.00 1164.96 1419.30 1681.38 1951.56 2229.84 2516.40 969.00 1229.68 1498.15 1774.79 2059.98 2353.72 2656.20 1020.00 1294.40 1577.00 1868.20 2168.40 2477.60 2796.00	158.47 321.75 489.71	-;	71	663.00	841.36	1025.05	1214.33	1409.46	1610.44	1817.40	613
765.00 970.80 1182.75 1401.15 1626.30 1858.20 2097.00 816.00 1035.52 1261.60 1494.56 1734.72 1982.08 2236.80 867.00 1100.24 1340.45 1883.04 2105.96 2376.60 918.00 1164.96 1419.30 1681.38 1951.56 2229.84 2516.40 969.00 1229.68 1498.15 1774.79 2059.98 2353.72 2656.20 1020.00 1294.40 1577.00 1868.20 2168.40 2477.60 2796.00			38	714.00	90.906	1103.90	1307.74	1517.88	1734.32	1957.20	\$14
816.00 1035.52 1261.60 1494.56 1734.72 1982.08 2236.80 867.00 1100.24 1340.45 1587.97 1843.14 2105.96 2376.60 918.00 1164.96 1419.30 1661.38 1951.56 2229.84 2516.40 969.00 1229.68 1498.15 1774.79 2059.98 2353.72 2656.20 1020.00 1294.40 1577.00 1868.20 2168.40 2477.60 2796.00			05	765.00	970.80	1182.75	1401.15	1626.30	1858.20	2097.00	\$15
867.00 1100.24 1340.45 1587.97 1843.14 2105.96 2376.60 918.00 1164.96 1419.30 161.38 1951.56 2229.84 2516.40 969.00 1229.68 1498.15 1774.79 2059.98 2353.72 2856.20 1020.00 1294.40 1577.00 1868.20 2168.40 2477.60 2796.00	195.04 396.00 602.72		72	816.00	1035.52	1261.60	1494.56	1734.72	1982.08	2236.80	\$18
918.00 1164.96 1419.30 1601.38 1951.56 2229.84 2516.40 969.00 1229.68 1498.15 1774.79 2059.98 2353.72 2656.20 1020.00 1294.40 1577.00 1868.20 2168.40 2477.60 2796.00	420.75		39	867.00	1100.24	1340.45	1587.97	1843.14	2105.96	2376.60	817
969.00 1229.68 1498.15 1774.79 2059.98 2353.72 2656.20 1020.00 1294.40 1577.00 1868.20 2168.40 2477.60 2796.00			90	918.00	1164.96	1419.30	1681.38	1951.56	2229.84	2516.40	\$18
1020.00 1294.40 1577.00 1868.20 2168.40 2477.60 2796.00			.73	969.00	1229.68	1498.15	1774.79	2059.98	2353.72	2656:20	\$19
	243.80 495.00 753		753.40	1020.00	1294.40	1577.00	1868.20	2168.40	2477.60	2796.00	\$20
		-									
											NO CONTRACTOR IN

How Money Grows at Interest

If one dollar be invested and the interest added to the principal annually, at the rates named, we shall have the following result as the accumulation of one hundred years.

One dollar,	100 years	at 1 per	cent	2.75
One dollar,	100 years	at 2 per	cent	7.25
One dollar,	100 years	at 3 per	$cent\dots\dots\dots$	19.25
One dollar,	100 years	at 4 per	cent	50.25
One dollar,	100 years	at 5 per	cent	131.50
One dollar,	100 years	at 6 per	cent	340.00
One dollar,	100 years	at 7 per	cent	868.00
One dollar,	100 years	at 8 per	cent	2,203.00

Time in which Money Doubles

Per C't. Simple Int.	Comp. Int.	Per C't. Simple Int.	Comp. Int.
2½ 40 years. 3 33 yrs. 4 mos.	35 years. 28 yrs. 26 da. 23 yrs. 164 da. 20 yrs. 54 da. 17 yrs. 246 da. 15 yrs. 273 da.	5 20 years. 6 16 yrs. 8 mos. 7 14 yrs. 104 da. 8 12½-years. 9 11 yrs. 40 da. 10 years.	14 yrs. 75 da. 11 yrs. 327 da. 10 yrs. 89 da. 9 yrs. 2 days. 8 yrs. 16 days. 7 yrs. 100 da.

Table Showing Number of Days Between Two Dates

1	Tope	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
	January.	365	31 365	59 28	90 59	120 89	$\frac{151}{120}$	181 150	212 181	$\frac{243}{212}$	273 242	$\frac{304}{273}$	334 303
	Febru'ry March	334	337	365	31	61	92	122	153 122	184 153	214 183	$\frac{245}{214}$	275 244
From	April May	$\frac{275}{245}$	$\frac{306}{276}$	334 304	365 335	365	31	61	92	123 92	153 122	184 153	214 183
Ę	June July	$\frac{214}{184}$	$\frac{245}{215}$	$\frac{273}{243}$	$\frac{304}{274}$	334	365 335	365	31	62	92	123	153
	August. Sept	$\frac{153}{122}$	184 153	212 181	$\frac{243}{212}$	273 242	$\frac{304}{273}$	334 303	365 334	$\frac{31}{365}$	61 30	92 61	122
	October. Nov	92 61	123 92	$\frac{151}{120}$	182 151	212 181	$\frac{243}{212}$	273 242	304 273	335 304	365 334	365	61 30
_[Dec	31	62	90	121	151	182	212	243	274	304	335	365

For example: From any date in July to the same date in February there are 215 days. When the day of the month to which you count is LATER, add the difference; if EARLIER, subtract it. Thus, from January 1 to May 1 are 120 days; to the 11th of May it is 10 days more; while from January 11 to May 1 it is 10 days less. In Leap Years add 1 day if the last day of February is included in the given time.

Dividing the table diagonally by short horizontal lines, the numbers below show the days to a date in the year following, and numbers above to a date within the same year.

The control of the co	
\$2 2\frac{1}{2} \$3 3\frac{1}{2} \$4 4\frac{1}{2} \$5 Days \$7 \$8 \$9 10	
-29	.50 .63 .83 .33 1.00 1.25 1.67 .55 1.50 1.88 2.50
$ \begin{bmatrix} 50 & .63 & .75 & .88 & 1.00 & 1.13 & 1.25 & 114 & 1.75 & 2.00 & 2.25 & 2.6 \\ .67 & .83 & 1.00 & 1.17 & 1.33 & 1.50 & 1.67 & 2 & 2.33 & 2.67 & 3.00 & 3.6 \\ .83 & 1.04 & 1.25 & 1.46 & 1.67 & 1.88 & 2.08 & 2.02 & 2.92 & 3.83 & 3.75 & 4.1 \\ 1.00 & 1.25 & 1.50 & 1.75 & 2.00 & 2.25 & 2.50 & 3 & 3.50 & 4.00 & 4.50 & 5.6 \\ \end{bmatrix} $	30 3.00 3.75 5.00 33 4.00 5.00 6.67 4 5.00 6.25 8.33 6 6.00 7.50 10.00
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	87 8.00 10.00 13.33 60 9.00 11.25 15.00 63 10.00 12.50 16.67
EXPLANATIONS.—The rate per Week will b top lines, and the Time, in the middle columns at \$7 per week, the wages for 4½ days will amo The third line (in <i>italic</i> figures) shows the	e found in the For example, unt to \$5.25. wages for one
Table of WAGES by the DAY The 10 He	
Table of WAGES by the DAY. The 10 Ho	
10 13 15 18 20 23 25 1 28 30 33 35 20 25 30 35 40 45 50 2 55 60 65	
.40 .50 .60 .70 .80 .90 1.00 .4 1.10 1.20 1.30 1 .50 .63 .75 .88 1.00 1.13 1.25 5 1.38 1.50 1.63 1 .60 .75 .90 1.05 1.20 1.35 1.50 6 1.65 1.80 1.95 2 .70 .88 1.05 1.23 1.40 1.58 1.75 7 1.93 2.10 2.28 2	1.40 1.60 1.80 2.00 1.75 2.00 2.25 2.50 2.10 2.40 2.70 3.00 2.45 2.80 3.15 3.50
90 1.13 1.35 1.58 1.80 2.03 2.25 9 2.48 2.70 2.93 3	2.80 3.20 3.60 4.00 3.15 3.60 4.05 4.50 3.50 4.00 4.50 5.00
	ır System.
\$1 1\frac{1}{4} 1\frac{1}{2} 1\frac{3}{4} \$2 2\frac{1}{4} 2\frac{1}{2} Hours 2\frac{3}{4} \$3 3\frac{1}{4} 3	$3\frac{1}{2} \$4 4\frac{1}{2} \5
13 .16 .19 .22 .25 .28 .31	.44
63 78 94 1.09 1.25 1.41 1.56 5 1.72 1.88 2.03 2 75 .94 1.13 1.31 1.50 1.69 1.88 6 2.06 2.25 2.44 2.68 2.81 1.91 1.53 1.75 1.97 2.19 7 2.41 2.63 2.84 3	.19 2.50 2.81 3.13 .63 3.00 3.38 3.75 .06 3.50 3.94 4.38 .50 4.00 4.50 5.00
At the rate of \$2.25 per day, 4 hours' wages, system, will come to 90 cts.; and by the eight hour	
Table of Board or Rent, by the Week, showin	
.25 .50 .75 \$1 \$2 \$3 \$4 \$5 Days \$6 \$8 \$9 10	
0.02	3 1.57 1.71 2.14
11.21.32 .43 .86 1.29 1.71 2.14 3 2.57 3.43 3.86 4.2 14 29 43 57 14 1 71 2 29 2 88 4 3 48 4 57 5 14 5 5	9 4.71 5.14 6.43 1 6.29 6.86 8.57
1.18 .36 .54 .71 1.43 2.14 2.86 3.57 5 4.29 5.71 6.43 7.1 2.21 .43 .64 .86 1.71 2.57 3.43 4.29 6 5.14 6.86 7.71 8.5	

Table of Wages by the Month from \$9.00 to \$75.00

89	10	11	12	13	14	Days	15	16	17	18	19	20
.30	.33	-37	.40	.43 .50	.47	1	.58	.53	.57	.60	.63	67
.35	-38	:42	.46	.50	.54	1	.58	.62	.05	.69	.73	-77
.69	.77	:85	.92	1.00	1.08 1.62	2	1.15	1.23	1.31 1.96	1.38 2.08	1.46 2.19	1.54 2.31
1.04 1.38	1.15	1.27	1.38 1.85	1.50 2.00	2.15	3	1.73 2.31	1.85 2.46	2.62	2.77	2.92	3.08
1.73	1.92	2.12	2.31	2.50	2.69	4 5	2.88	3.08	3.27	3.46	3.65	3.85
2.08	2.31	2.54	2.77	3.00	3.23	6	3.46	3.69	3.92	4.15	4.38	4,62
2,42	2.69	2.96	3.23	3.50	3,77	7	4.04	4.31	4.58	4.85	5.12	5.38
2.77	3 08		3,69	4.00	4.31	8	4.62	4.92	5.23	5.54	5.85	6.15
3.12	3.46	3.81	4.15	4.50	4.85	9	5.19	5 54	5,88	6.23	6.58	6.92
3.46	3.85	4.23	4.62	5.00	5.38	10	5.77	6.15	6.54	6.92	7.31	7 69
3.81	4.23	4.65	5.08	5.50	5.92	11	6.35	6.77	7.19	7.62	8.04	8.46
4.15	4.62	5 08	5.54	6 00	6.46		6.92	7.38	7.85	8.31	8.77	9.23
4.50 4.85	5 00 5 38	5.50 5.92	6.00 6.46	6.50 7.00	7.00	13 14	7.50 e.08	8.00 8.62	8.50 9,15	9.00 9.69	9.50 10.23	10.00 10.77
5.19	5.77	6.35	6.92	7.50	8.08	15	8.65	9.23	9.81	10.38		11.54
5.54	6.15	6.77	7.38	8.00	8.62	16	9.23	9.85	10.46	11.08	11.69	12 31
5.88	6.54	7.19	7 85	8.50	9.15	17	9.81	10.46	11.12	11.77	12.42	13.08
6.23	6.92	7 62	8.31	9.00	9.69	18	10.38	11.08	11.77	12.46	13.15	13.85
6.58	7.31	8.01	8.77	9.50		19	10.96	11,69	12.42	13.15	13.88	14.62
6.92	7.69	8.46	9.23	10.00		20	11.54	12.31	13.08	13.85	14.62	15 38
7.27	8.08	8.88	9.69	10.50	11.31	21	12.12	12.92	13.73	14.54	15.35	16.15
7.62	8.46	9.31	10.15	11.00		22	12.69	13.54	14.38	15.23		16 92
7.96	8.85	9.73	10.62		12.38	23	13.27	14.15	15.04	15.92	16.81	17.69
8.31 8.65	9.23 9.62	10.15 10.58	11.08 11.54		12.92 13.46		13.85 14.42	14.77 15.38	15.69 16.35	16.62 17.31	17.54 18.27	18 46 19.23
		11.00					15.00			18.00		
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		g the	1 0 0 1									
21	22	23	80	$\frac{25}{83}$	30	Days	$\frac{35}{I.17}$	40	1.50	1.67	2.00	75
.81	7.3 .85	77 88	.92	.96	1.15	1	1.35	1.54	1.73	1.92	2.31	2.50
1.62	1,69	1.77	1.85	1.92	2.31	2	2.69	8.08	3.46	3.85	4,62	5.77
2.42	2.54	2.65	2.77	2.88	3.46	$\tilde{3}$	4.01	4 62	5.19	5.77	6.92	8.65
3.23	3,38	3.54	3.69	3.85	4.62	4	5.38	6.15	6.92	7.69	9 23	11.54
4.04	4.23	4.42	4 62	4.81	5.77	5	6.73	7.69	8.65	9.62	11.54	14.42
4.85	5.08	5.31	5.54	5.77	6.92	6	8.08	9.23	10.38	11 54	13.85	17.31
5.65	5.92	6.19	6 46	6.73	8.08	7	9.42	10.77	12.12	13.46	16.15	20.19
6.46	6.77 7.62	7.08	7.38 8.31	7.69 8.65	9.23	8	10.77	12 31	13.85	15.38	18.46	23.08
7.27 8.08	8.46	8.85	9.23	9.62	10.38 11.54	10	12.12 13.46	13.85 15.38	15.58 17.31	17.31 19.23	20.77 23.08	25.96 28.85
8.88	9.31	9.73	10.15	10.58		îĭ	14.81	16.92	19.04	21.15	25.38	31.73
	10.15	10.62	11.08	11.54	13.85	12	16.15	18.46	20.77	23.08	27.69	34.62
10.50	11.00	11.50	12.00	12.50	15.00	13	17.50		22.50	25.00		37.50
11.31	11.85	12.38	12.92	13.46	16.15	14	18.85	21.54	24.23	26.92	32.31	40.38
12.12	12.69	13.27	13.85	14.42	17.31	15	20.19	23.08		28.85	34.62	43.27
12.92	13.54	14.15	14.77	15.38	18.46	16	21.54	24.62	27.69	30.77	36.92	46.15
13.73	14.38	15.04	15.69	16.35	19.62	17	22.88	26.15	29.42	32.69	39.23	49.04
14.54 15.35	15.23 16.08	15.92 16.81	16.62 17.54	17.31 18.27	20.77 21.92	18 19	24.23 25.58	27.69 29.23	$\frac{31.15}{32.88}$	34.62 36.54	$41.54 \\ 43.85$	51.92 54.81
16.15	16.92	17.69	18.46	19.23	23.08	20	26.92	30.77	34.62	38.46	46.15	57.69
16.96	17.77	18.58	19.38	20,19	24.23	$\tilde{2}$ 1	28.27	32.31	36.35	40.38	48.46	60.58
17.77	18.62	19.46	20.31	21.15	25.38	22	29.62	33.85		42.31	50.77	63.46
18.58	19.46	20.35	21.23	22,12	26.54	23	30.96	35.38	39.81	44.23	53.08	66.35
	20.31	21.23	22.15	23.08	27.69	24	32.31	36.92	41.54	46.15	55.38	69.23
20.19 21.00	21.15	22.12	23.08	24.04	28.85	25	33.65	38.46	43.27	48.08	57.69	72.12

The center column shows the days and the black face figures at the top show rate per month. Example—21 days' work at \$30 per month; find it under 30, opposite 21. Answer. \$24.23.

READY RECKONER.

READY RECKONER, to find the Price of any Number of Pounds, Yards Pieces, or Bushels, from 2 cents to \$3.00.

The first column contains the NUMBER, the top columns the PRICES.

Nos	2 ct.	3 et.	4 ct.	5 et.	6 ct.	6½ ct.	7 ct.	8 ct.	9 ct.	10 ct.	11 ct.
2	. 4	. 6	. 8	.10	.12	.121/2	.14	.16	.18	.20	.22
2 3 4 5 6 7 8	. 6	. 9	.12	.15	.18	.183/4	.21	.24	.27	.30	.33
- 4	. 8	.12	.16	.20 .25	.24	.25	.28 .35	.32	.36 .45	.40 .50	.44
6	.12	.18	.24	.30	.36	371/2	.42	.48	.54	.60	
7	.14	.21	.28	.35	.42	.31½ .37½ .43¾	.49	.56	.54 .63	.70	·66 .77
8	.1%	.24	.32	.40	.48		.56	.64	.72	.80	.88
9	.18	.27	.36	.45	.54	.56½ .62½ .68¾	.63	.72	.81	.90	.99
10 11	.20 .22	.30	.40	.50 .55	•60	.621/2	.70 .77	.80 .88	.90 .99	1.00 1.10	1.10
12	.24	.36	.48	.60	·66 .72	.75	.84	.96	1.08	1.20	1.32
12 13	.24	.39	.52	.65	.78	.811/4	.91	1.04	1.17	1.20 1.30	1.32 1.43
14	.28	.42	.56	.70	.84	.81½ .87½	.98	1.04 1.12	1.26	1.40	1.54
15	.30	.45	.60	.75	.90	0.33/.	1.05	1.20 1.28 1.36 1.44	1.35	1.50	1.65
16 17	.32	.48	.64 .68	-80	.96	1.00 1.06 ¹ / ₄ 1.12 ¹ / ₂ 1.18 ³ / ₄	1.12	1.28	1.44	1.60	1.76 1.87
18	.34	.51 .54	.72	.85	1.02 1.08	1 191/	1.19 1.26	1.30	1.53 1.62	1.70 1.80	1.98
19	.38	.57	.76	.95	1.14	1.183/	1.33	1.52	1.71	1.90	2.09
. 19 20	.40	.60	.80	1.00	1.20	1.25	1.40	1.60	1.80	2.00	2.20
25	.50	.75	1.00	1.25 1.50	1.20 1.50	1.16% 1.25 1.561/4 1.871/2	1.40 1.75 2.10	1.60 2.00	2.25	2.50	2. 5
3 ₀ 4 ₀	.60 .80	.90	1.20	1.50	1.80		2.10	2.40	2.70	3.00	3.30
50 50	1.00	1.20 1.50	1.60 2.00	2.00	2.40 3.00	2.50	2.80 3.50	3.20 4.00	3.60 4.50	4.00 5.00	4.40 5.50
	1.20	1.80	2.40	2.50 3.00	3 60	$\frac{3.121/_{2}}{3.75}$	4 20	4.80	5.40	6.00,	6.60
60 70	1.40	2.10	2.80	3.50	4,20	4.371/2	4.20 4.90	5.60	6.30	7.00	7.70
80	1.60	2.40	3.20	4.00	4.80	5.00	5.60	6.40	7.20	8.00	7.70 8.80
90	1.80	2.70	3.60	4.50	5.40	5.621/2	6.30	7.20	8.10	9.00	9.90
100	2.00	3.00	4.00			6.25	7.00		9.00	10.00	11.00
Section 2	Sec.	0.00	1.00	5.00	6.00	0.20	1.00	-8.00	0.00	20100	
Statute of		12½ct.	Market St. St.	14 ct.	15 ct.	16 ct.	18 ct.	18¾ct.	19 ct.	20 ct.	21 et.
Nos	12 ct.	12½ct.	13et.	14 ct.	15 ct.	16 ct.	18 ct.	18¾ct.	19 et.	20 ct.	21 ct.
Nos	12 ct.	12½ct.	13et.	.28 .42	15 ct.	16 ct.	18 ct.	183/4ct. .371/2 .561/4	19 et.	20 ct.	21 ct. .42 .63
Nos	12 ct. .24 .36 .48	12½ct. .25 .37½	13et. .26 .39	.28 .42 .56	.30 .45	.32 .48 .64	.36 .54 .72	18 ³ / ₄ et. .37 ¹ / ₂ .56 ¹ / ₄	19 ct. .38 .57 .76	20 ct. .40 .60 .80	21 ct. .42 .63 .84
Nos 2 3 4 5	12 ct. .24 .36 .48 .60	12½ct. .25 .37½	13et. .26 .39	.28 .42 .56	.30 .45 .60	.32 .48 .64 .80	.36 .54 .72 .90	18 ³ / ₄ et. .37 ¹ / ₂ .56 ¹ / ₄	19 ct. .38 .57 .76	20 ct. .40 .60 .80 1.00	21 ct. .42 .63 .84
Nos 2 3 4 5 6	12 ct. .24 .36 .48 .60 .72	12½ct. .25 .37½ .50 .62½	13et. 26 39 .52 .65	.28 .42 .56 .70 .84	15 ct. .30 .45 .60 .75 .90 1.05	.32 .48 .64 .80 .96	.36 .54 .72 .90 1.08 1.26	18 ³ / ₄ et. .37 ¹ / ₂ .56 ¹ / ₄ .75 .93 ³ / ₄ 1.12 ¹ / ₂ 1.31 ¹ / ₄	.38 .57 .76 .95 1.14 1.33	20 ct. .60 .80 1.00 1.20 1.40	21 ct. .42 .63 .84 1.05 1.26 1.47
Nos 2 3 4 5 6 7 8	12 ct. .24 .36 .48 .60 .72 .84 .96	12½ct. .25 .37½ .50 .62½ .75 .87½ 1.00	13ct. 26 .39 .52 .65 .78 .91 1.04	.28 .42 .56 .70 .84 .98	15 ct. .30 .45 .60 .75 .90 1.05 1.20	.32 .48 .64 .80 .96 1.12 1.28	.36 .54 .72 .90 1.08 1.26 1.44	18 ³ / ₄ et. .37 ¹ / ₂ .56 ¹ / ₄ .75 .93 ³ / ₄ 1.12 ¹ / ₂ 1.31 ¹ / ₄ 1.50	.38 .57 .76 .95 1.14 1.33 1.52	20 ct. .40 .60 .80 1.00 1.20 1.40 1.60	21 ct. .42 .63 .84 1.05 1.26 1.47 1.68
Nos 2 3 4 5 6 7 8 9	12 ct. .24 .36 .48 .60 .72 .84 .96 1.08	12½ct. .25 .37½ .50 .62½ .75 .87½ 1.00 1.12½	13ct. .26 .39 .52 .65 .78 .91 1.04 1.17	.28 .42 .56 .70 .84 .98 1.12 1.26	15 ct. .30 .45 .60 .75 .90 1.05 1.20 1.35	.32 .48 .64 .80 .96 1.12 1.28 1.44	.36 .54 .72 .90 1.08 1.26 1.44 1.62	18 ³ / ₄ et. .37 ¹ / ₂ .56 ¹ / ₄ .75 .93 ³ / ₄ 1.12 ¹ / ₂ 1.31 ¹ / ₄ 1.50	19 ct. .38 .57 .76 .95 1.14 1.33 1.52 1.71	20 ct. .60 .80 1.00 1.20 1.40 1.60 1.80	21 ct. .42 .63 .84 1.05 1.26 1.47 1.68 1.89
Nos 2 3 4 5 6 7 8 9 10	12 ct. -24 -36 -48 -60 -72 -84 -96 1.08 1.20	12½ct. -25 -37½ -50 -62½ -75 -87½ 1.00 1.12½ 1.25	13ct. -26 .39 .52 .65 .78 .91 1.04 1.17 1.30	.28 .42 .56 .70 .84 .98 1.12 1.26 1.40	.30 .45 .60 .75 .90 1.05 1.20 1.35	.32 .48 .64 .80 .96 1.12 1.28 1.44	.36 .54 .72 .90 1.08 1.26 1.44 1.62	18 ³ / ₄ et. .37 ¹ / ₂ .56 ¹ / ₄ .75 .93 ³ / ₄ 1.12 ¹ / ₂ 1.31 ¹ / ₄ 1.50	.38 .57 .76 .95 1.14 1.33 1.52 1.71 1.90	20 ct. .40 .60 .80 1.00 1.20 1.40 1.60 1.80 2.00	21 ct. .42 .63 .84 1.05 1.26 1.47 1.68 1.89 2.10
Nos 2 3 4 5 6 7 8 9 10 11	12 ct. -24 -36 -48 -60 -72 -84 -96 1.08 1.20 1.32	12½ct. .25 .37½ .50 .62½ .75 .87½ 1.00 1.12½ 1.25 1.37½	13et. .26 .39 .52 .65 .78 .91 1.04 1.17 1.30 1.43	28 .42 .56 .70 .84 .98 1.12 1.26 1.40	15 ct. .30 .45 .60 .75 .90 1.05 1.20 1.35 1.50 1.65	.32 .48 .64 .80 .96 1.12 1.28 1.44 1.60 1.76	18 ct. .36 .54 .72 .90 1.08 1.26 1.44 1.62 1.80 1.98	18 ³ / ₄ et. .37 ¹ / ₂ .56 ¹ / ₄ .75 .93 ³ / ₄ 1.12 ¹ / ₂ 1.31 ¹ / ₄ 1.50 1.68 ³ / ₄ 1.87 ¹ / ₂ 2.06 ¹ / ₄ 2.25	19 ct. .38 .57 .76 .95 1.14 1.33 1.52 1.71 1.90 2.09	20 ct. .60 .80 1.00 1.20 1.40 1.60 1.80 2.00 2.20	21 ct. .42 .63 .84 1.05 1.26 1.47 1.68 1.89 2.10 2.31
Nos 2 3 4 5 6 7 8 9 10 11 12	12 ct. -24 -36 -48 -60 -72 -84 -96 1.08 1.20 1.32 1.44	12½ct. 25 37½ 50 62½ 75 87½ 1.00 1.12½ 1.25 1.37½ 1.50	13ct. 26 39 .52 .65 .78 .91 1.04 1.17 1.30 1.43 1.56 1.66	.28 .42 .56 .70 .84 .98 1.12 1.26 1.40 1.54	.30 .45 .60 .75 .90 1.05 1.20 1.35 1.50 1.65	.32 .48 .64 .80 .96 1.12 1.28 1.44 1.60 1.76 1.92	18 ct. .36 .54 .72 .90 1.08 1.26 1.44 1.62 1.80 1.98 2.16 2.34	18 ³ / ₄ et. .37 ¹ / ₂ .56 ¹ / ₄ .75 .93 ³ / ₄ 1.12 ¹ / ₂ 1.31 ¹ / ₄ 1.50 1.68 ³ / ₄ 1.87 ¹ / ₂ 2.06 ¹ / ₄ 2.25	19 ct. .38 .57 .76 .95 1.14 1.33 1.52 1.71 1.90 2.09 2.28 2.47	20 ct. .40 .60 .80 1.00 1.20 1.40 1.60 1.80 2.00	21 ct. .42 .63 .84 1.05 1.26 1.47 1.68 1.89 2.10 2.31 2.52 2.73
Nos 2 3 4 5 6 7 8 9 10 11 12 13 14	12 ct. .24 .36 .48 .60 .72 .84 .96 1.08 1.20 1.32 1.44 1.56	12½ct. 25 37½ 50 62½ 75 87½ 1.00 1.12½ 1.25 1.37½ 1.50	13ct. 26 39 .52 .65 .78 .91 1.04 1.17 1.30 1.43 1.56 1.66	28 .42 .56 .70 .84 .98 1.12 1.26 1.40 1.54 1.68 1.82 1.96	15 ct. .30 .45 .60 .75 .90 1.05 1.20 1.35 1.50 1.65 1.80 1.95 2.10	16 ct. .32 .48 .64 .80 .96 1.12 1.28 1.44 1.60 1.76 1.92 2.08 2.24	18 ct. .36 .54 .72 .90 1.08 1.26 1.44 1.62 1.80 1.98 2.16 2.34	18 ³ / ₄ et. .37 ¹ / ₂ .56 ¹ / ₄ .75 .93 ³ / ₄ 1.12 ¹ / ₂ 1.31 ¹ / ₄ 1.50 1.68 ³ / ₄ 1.87 ¹ / ₂ 2.06 ¹ / ₄ 2.25	19 ct. .38 .57 .76 .95 1.14 1.33 1.52 1.71 1.90 2.09 2.28 2.47	20 ct. .40 .60 .80 1.00 1.20 1.40 1.60 1.80 2.90 2.40 2.40 2.60 2.80	21 ct. .42 .63 .84 1.05 1.26 1.47 1.68 2.10 2.31 2.52 2.73 2.94
Nos 2 3 4 5 6 7 8 9 10 11 12 13 14 15	12 ct. -24 -36 -48 -60 -72 -84 -96 1.08 1.20 1.32 1.44 1.568 1.68	12½ct. -25 -37½ -50 -62½ -75 -87½ 1.00 1.12½ 1.25 1.37½ 1.50 1.62½ 1.75	13et. 26 39 .52 .65 .78 .91 1.04 1.17 1.30 1.43 1.56 1.82 1.95	.28 .42 .566 .70 .84 .98 1.12 1.26 1.40 1.54 1.82 1.96 2.10	15 ct. .30 .45 .60 .75 .90 1.05 1.20 1.35 1.50 1.65 1.80 1.95 2.10 2.25	16 ct. -32 -48 -64 -80 -96 1.12 1.28 1.44 1.60 1.76 1.92 2.08 2.24 2.40	18 ct. -36 -54 -72 -90 1.08 1.26 1.44 1.62 1.80 1.98 2.16 2.34 2.52 2.70	18 ³ / ₄ et. .37 ¹ / ₄ .75 .93 ³ / ₄ 1.12 ¹ / ₂ 1.31 ¹ / ₄ 1.50 1.68 ⁷ / ₄ 2.96 ¹ / ₄ 2.25 2.43 ³ / ₄ 2.62 ¹ / ₂ 2.81 ¹ / ₄	19 ct. -38 -57 -76 -95 1.14 1.33 1.52 1.71 1.90 2.09 2.28 2.47 2.66 2.85	20 ct. .40 .60 .80 1.00 1.20 1.40 1.60 2.20 2.40 2.60 2.80 3.00	21 ct. .42 .63 .84 1.05 1.26 1.47 1.68 1.89 2.10 2.31 2.52 2.73 2.94 3.15
Nos 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16	12 ct. .24 .36 .48 .60 .72 .84 .96 1.08 1.20 1.32 1.44 1.56 1.68 1.80 1.92	12½ct. .25 .37½ .50 .62½ .75 .87½ .1.00 .1.12½ .1.25 .1.37½ .1.50 .1.62½ .1.75 .1.87½ .2.00	13ct. -26 -39 -52 -65 -78 -91 1.04 1.17 1.36 1.43 1.56 1.69 1.82 1.92 1.92 1.92 1.93 1.94	14 ct. .28 .42 .566 .70 .84 .98 1.12 1.26 1.40 1.54 1.68 1.82 1.96 2.10 2.24	15 ct. .30 .45 .60 .75 .90 1.05 1.20 1.35 1.50 1.65 1.80 1.95 2.10 2.25 2.40	.32 .48 .64 .80 .96 1.12 1.28 1.44 1.60 1.76 1.92 2.08 2.24 2.40 2.56	18 ct. -36 -54 -72 -90 1.08 1.26 1.44 1.62 1.80 1.98 2.16 2.34 2.52 2.70 2.88	18 ³ / ₄ et. .37 ¹ / ₂ .56 ¹ / ₄ .75 .93 ³ / ₄ 1.12 ¹ / ₂ 1.31 ¹ / ₄ 1.50 1.68 ³ / ₄ 1.87 ¹ / ₂ 2.06 ¹ / ₄ 2.62 ¹ / ₂ 2.81 ¹ / ₄ 3.00	19 ct. -38 -57 -76 -95 1.14 1.33 1.52 1.71 1.90 2.09 2.28 2.47 2.66 2.85 3.04	20 ct. .40 .60 .80 1.00 1.20 1.40 1.60 1.80 2.90 2.20 2.40 2.60 2.80 3.00 3.20	21 ct. .42 .63 .84 1.05 1.47 1.68 1.89 2.10 2.31 2.52 2.73 2.94 3.15 3.36
Nos 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17	12 ct. -24 -36 -48 -60 -72 -84 -96 1.08 1.22 1.44 1.56 1.68 1.80 1.92 2.04	12½ct. .25 .37½ .50 .62½ .75 .87½ 1.00 1.12½ 1.25 1.37½ 1.50 1.62½ 1.75 1.87½ 2.00 2.12½	13ct. -26 -39 -52 -65 -78 -91 1.04 1.17 1.30 1.43 1.56 1.82 1.95 2.08 2.21	28 42 .56 .70 .84 .98 1.12 1.26 1.40 1.54 1.68 1.82 1.96 2.10 2.24 2.38	15 ct. .30 .45 .60 .75 .90 1.05 1.20 1.35 1.50 1.65 1.80 2.10 2.25 2.40 2.55	.32 .48 .64 .80 .96 1.12 1.28 1.44 1.60 1.76 1.92 2.08 2.24 2.40 2.56 2.72	18 ct. -36 -54 -72 -90 1.08 1.26 1.44 1.62 1.80 1.98 2.16 2.34 2.52 2.70 2.88 3.06	18 ³ / ₄ et. .37 ¹ / ₂ .56 ¹ / ₄ .75 .93 ³ / ₄ 1.12 ¹ / ₂ 1.31 ¹ / ₄ 1.50 1.68 ³ / ₄ 1.87 ¹ / ₂ 2.06 ¹ / ₄ 2.62 ¹ / ₂ 2.81 ¹ / ₄ 3.00	19 ct. .38 .57 .76 .95 1.14 1.33 1.52 1.71 1.90 2.09 2.28 2.47 2.66 2.85 3.04 3.23	20 ct. .40 .60 .80 1.00 1.20 1.40 1.60 2.90 2.20 2.20 2.80 3.00 3.20 3.20 3.20 3.20	21 ct. .42 .63 .84 1.05 1.26 1.47 1.68 1.89 2.10 2.31 2.52 2.73 2.94 3.15 3.36
Nos 2 3 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19	12 ct. -24 -36 -48 -60 -72 -84 -96 1.08 1.20 1.32 1.44 1.56 1.68 1.80 1.92 2.04 2.16	12½ct. 25 37½ 50 62½ 75 87½ 1.00 1.12½ 1.25 1.37½ 1.50 1.62½ 1.75 2.00 2.12½ 2.25	13et. -26 -39 -52 -65 -78 -91 1.04 1.17 1.30 1.43 1.56 1.82 1.92 1.92 2.08 2.21 2.31 2.41	28 42 .56 .70 .84 .98 1.12 1.26 1.40 1.54 1.68 1.82 1.92 2.24 2.38 2.52	15 ct. .300 .455 .600 .755 .900 1.055 1.200 1.355 1.500 1.95 2.100 2.255 2.400 2.555 2.700	16 ct. .32 .48 .64 .80 .96 1.12 1.28 1.44 1.60 1.76 1.92 2.08 2.24 2.40 2.56 2.72 2.88	18 ct. .36 .54 .72 .90 1.08 1.26 1.44 1.62 1.80 2.16 2.34 2.52 2.70 2.88 3.06 3.24 3.42	183/4 ct. 	19 ct. .38 .57 .76 .95 1.14 1.33 1.52 1.71 1.90 2.09 2.28 2.47 2.66 2.85 3.04 3.23 3.42	20 ct. .40 .60 .80 1.00 1.20 1.40 1.60 2.90 2.20 2.40 2.60 3.20 3.20 3.40 3.60	21 ct. .42 .63 .84 1.05 1.26 1.47 1.68 1.89 2.10 2.31 2.52 2.73 2.94 3.36 3.37 3.78
Nos 2 3 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19 20	12 ct. -24 -36 -48 -60 -72 -84 -96 1.08 1.20 1.32 1.44 1.56 1.68 1.80 2.04 2.16 2.24	12½ct. -25 -37½ -50 -62½ -75 -87½ 1.00 1.12½ 1.25 1.37½ 1.50 2.12½ 2.25 2.37½ 2.50	13et. -26 -39 -52 -65 -78 -91 1.04 1.17 1.30 1.43 1.56 2.195 2.21 2.34 2.34 2.46	28 42 .56 .70 .84 .98 1.12 1.26 1.40 1.54 1.68 2.10 2.24 2.38 2.56 2.80	15 ct. .30 .45 .60 .75 .90 1.35 1.50 1.65 1.80 1.95 2.10 2.25 2.40 2.55 2.70 2.85 3.00	.32 .48 .64 .80 .96 1.12 1.28 1.44 1.40 1.76 1.92 2.08 2.24 2.40 2.56 2.72 2.88 3.04	18 ct. -36 -54 -72 -90 -1.08 -1.26 -1.44 -1.62 -1.80 -1.98 -2.14 -2.52 -2.70 -2.83 -2.84 -3.42 -3.60 -3.60	183/4 ct.	19 ct. -38 -57 -76 -95 -1.14 -1.33 -1.52 -1.71 -1.90 -2.09 -2.28 -2.47 -2.66 -2.85 -3.04 -3.23 -3.42 -3.61 -3.80	20 ct. .40 .60 .80 1.00 1.20 1.40 1.60 2.20 2.40 2.26 2.80 3.00 3.20 3.40 3.60 3.80 4.00	21 ct. .42 .63 .84 1.05 1.26 1.89 2.10 2.31 2.52 2.73 2.94 3.15 3.36 3.57 3.78 3.99 4.20
Nos 2 3 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19 20	12 ct. -24 -36 -48 -60 -72 -84 -96 1.08 1.20 1.32 1.44 1.56 1.68 1.80 1.92 2.04 2.16 2.28 2.40 3.00	12½ct. -25 -37½ -50 -62½ -75 -87½ -1.00 -1.12½ -1.25 -1.37½ -1.50 -1.62½ -1.75 -1.87½ -2.00 -2.12½ -2.25 -2.37½ -2.37½ -2.31½	13ct. -26 -39 -52 -65 -78 -91 1.04 1.17 1.30 1.43 1.56 2.16 2.21 2.21 2.21 2.47 2.60 2.32 3.32 3.32	28 42 56 70 84 1.12 1.26 1.40 1.54 1.88 1.82 2.10 2.24 2.38 2.52 2.66 2.80 3.50	15 ct. .30 .45 .60 .75 .90 1.05 1.20 1.35 1.50 1.65 2.10 2.25 2.40 2.55 2.70 2.85 3.00 3.75	.32 .48 .64 .80 .96 1.12 1.28 1.28 1.44 1.60 1.76 1.92 2.08 2.24 2.40 2.56 2.72 2.88 3.04 3.20 4.00	18 ct. .36 .54 .72 .90 1.08 1.26 1.44 1.62 1.80 1.98 2.16 2.34 2.52 2.70 2.88 3.06 3.24 3.42 3.60 4.50	183/4 ct. .371/2 .566/4 .75 .933/4 1.121/2 1.311/4 1.50 1.683/4 2.061/4 2.25 2.433/4 2.621/2 2.811/4 3.371/2 3.371/2 3.561/4 4.683/4	19 ct. .38 .57 .76 .95 1.14 1.33 1.52 1.71 1.90 2.09 2.28 2.47 2.66 2.85 3.04 3.23 3.42 3.61 3.80 4.75	20 ct. .40 .60 .80 1.20 1.40 1.60 2.00 2.20 2.20 2.260 2.80 3.20 3.20 3.40 3.60 3.80 4.00 5.00	21 ct. .42 .63 .84 1.05 1.26 1.89 2.10 2.31 2.52 2.73 2.94 3.15 3.36 3.57 3.78 3.99 4.20
Nos 2 3 4 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30	12 ct. -24 -36 -48 -60 -72 -84 -96 1.08 1.32 1.44 1.56 1.68 1.80 1.92 2.04 2.14 2.14 3.00	12½ct. -25 -37½ -50 -62½ -75½ -75½ -75½ -75½ -75½ -75½ -75½ -75	13et. -26 -39 -52 -65 -78 -91 1.04 1.17 1.30 1.43 1.56 1.69 1.82 2.21 2.34 2.34 2.47 2.60 3.25 3.39 3.39	.28 .42 .56 .70 .84 .98 1.12 1.26 1.40 1.54 1.68 1.82 1.96 2.10 2.24 2.38 2.52 2.66 2.80 3.50 4.20	15 ct. .30 .45 .60 .75 .90 1.05 1.20 1.35 1.50 1.95 2.10 2.25 2.40 2.55 2.70 2.85 3.00 3.75 4.50	.32 .48 .64 .80 .96 1.12 1.28 1.44 1.60 1.76 2.08 2.24 2.40 2.56 2.72 2.88 3.04 3.20 4.80	18 ct. .36 .54 .72 .90 1.08 1.26 1.44 1.62 1.80 1.98 2.16 2.34 2.52 2.70 2.88 3.06 3.24 3.42 3.60 4.50	18 ³ / ₄ ct. 37 ¹ / ₂ 56 ¹ / ₄ 75 93 ³ / ₄ 1.12 ¹ / ₂ 1.31 ¹ / ₄ 1.50 1.68 ³ / ₄ 1.87 ¹ / ₂ 2.62 ¹ / ₂ 2.43 ³ / ₄ 3.37 ¹ / ₂ 3.37 ¹ / ₄ 3.56 ¹ / ₄ 4.68 ³ / ₄ 5.62 ¹ / ₆	19 ct. -38 -57 -76 -95 -1.14 -1.33 -1.52 -1.71 -1.90 -2.08 -2.47 -2.66 -2.66 -3.04 -3.23 -3.42 -3.61 -3.80 -4.75 -5.70	20 ct. .40 .60 .80 1.00 1.20 1.40 1.60 2.90 2.20 2.40 2.60 2.80 3.00 3.20 3.40 3.60 3.80 4.00 5.00 6.00	21 ct. .42 .63 .84 1.05 1:26 1.47 1.68 1.89 2.10 2.31 2.52 2.73 2.73 2.94 3.15 3.36 3.57 3.78 4.20 5.23 6.30
Nos 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30 40	24 ct. 24 36 48 600 72 84 .96 1.08 1.20 1.32 1.44 1.56 1.68 1.80 2.16 2.28 2.40 3.00 3.60 4.80	12½ct. -25 -37½ -50 -62½ -75 -87½ -1.00 -1.12½ -1.25 -1.37½ -1.50 -1.62½ -1.75 -1.87½ -2.00 -2.12½ -2.55 -3.12½ -3.75 -5.00	13ct. -26 -39 -65 -65 -78 -91 1.04 1.17 1.30 1.43 1.56 1.69 1.82 1.95 2.08 2.21 2.31 2.47 2.60 3.25	28 42 56 770 84 98 1.12 1.26 1.54 1.68 1.82 1.96 2.10 2.24 2.38 2.52 2.66 2.80 3.50 4.20 5.60	15 ct. .30 .45 .60 .75 .90 1.05 1.20 1.65 1.80 2.25 2.10 2.25 2.70 2.85 3.00 3.75 4.50 6.00	.32 .48 .64 .80 .96 1.12 1.28 1.44 1.60 1.76 1.92 2.04 2.40 2.56 2.72 2.88 3.04 4.00 4.40 6.40	18 ct. -36 -54 -72 -90 1.08 1.26 1.44 1.62 1.80 2.16 2.34 2.52 2.70 2.88 3.06 3.24 3.42 3.60 4.50 5.40 7.20	183/4 ct. .371/2 .566/4 .75 .933/4 1.121/2 1.50 1.683/4 2.621/2 2.433/4 2.621/2 2.811/4 3.00 3.183/4 3.561/4 3.75 4.683/4 5.621/2 7.50	19 ct. .38 .57 .76 6.95 1.14 1.33 1.52 1.71 1.90 2.28 2.47 2.66 2.85 3.04 3.23 3.42 3.61 3.80 4.75 5.70 7.60	20 ct. .40 .60 .80 1.20 1.40 1.60 1.80 2.20 2.40 2.60 3.20 3.40 3.60 3.80 4.00 5.00 6.00 8.00	21 ct. .42 .63 .84 1.05 1.26 1.47 1.68 1.89 2.10 2.31 2.31 2.31 2.31 3.36 3.57 3.78 3.99 4.20 5.25 6.30
Nos 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30 40 50	12 ct. 24 -36 -48 -600 -722 -84 -96 1.08 1.20 1.32 1.44 2.16 2.28 2.10 3.60 4.80 3.60 4.80 6.00	12½ct. -26 -37½ -50 -62½ -75 -87½ -1.00 -1.12½ -1.25 -1.37½ -1.50 -1.62½ -1.75 -1.87½ -2.50 -2.12½ -2.50 -3.12½ -3.75 -5.00 -6.25	13ct. -26 .39 .52 .65 .78 .91 1.04 1.17 1.30 1.43 1.56 1.89 1.82 1.95 2.08 2.21 2.34 2.47 2.40 3.25 3.90 5.20 6.50	.28 .42 .56 .70 .84 .98 1.12 1.26 1.40 1.54 1.68 2.10 2.24 2.38 2.52 2.66 2.80 3.50 4.20 5.60	15 ct. .30 .45 .60 .75 .90 1.05 1.20 1.35 1.50 1.65 2.10 2.25 2.40 2.55 2.70 2.85 3.00 3.75 4.50 6.00 7.50	16 ct. .32 .48 .64 .80 .96 1.12 1.28 1.44 1.60 1.76 1.92 2.08 2.24 2.40 2.40 3.20 4.80 6.40 8.00	18 ct. -36 -54 -72 -90 1.08 1.26 1.44 1.62 1.80 1.98 2.16 2.34 2.52 2.70 2.88 3.06 3.24 3.42 3.60 5.40 7.20 9.90	183/4 ct. 371/3 .561/4 .75 .933/4 1.50/4 1.50/4 1.50/4 2.061/4 2.25 2.433/4 2.621/2 2.811/4 3.375/4 6.883/4 3.75 4.683/4 3.75 4.683/4 3.75 4.683/4 3.75 4.683/4 3.75 4.683/4 3.75 4.683/4 3.75	19 ct. .38 .57 .76 .95 1.14 1.33 1.52 1.71 1.90 2.09 2.28 2.47 2.66 2.85 3.04 3.23 3.42 3.61 3.80 4.75 5.70 7.60	20 ct. .40 .60 .80 1.20 1.40 1.60 1.80 2.20 2.40 2.60 2.80 3.00 3.20 3.40 3.60 3.60 3.80 4.00 6.90 8.80 8.00 8	21 ct. .42 .63 .84 1.05 1.26 1.47 1.68 1.89 2.10 2.31 2.52 2.73 2.94 3.15 3.36 3.57 3.78 3.99 4.20 8.49 10.50
Nos 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30 40	24 ct. 24 36 48 600 72 84 .96 1.08 1.20 1.32 1.44 1.56 1.68 1.80 2.16 2.28 2.40 3.00 3.60 4.80	12½ct. -25 -37½ -50 -62½ -75 -87½ -1.00 -1.12½ -1.25 -1.37½ -1.50 -1.62½ -1.75	13ct. .266 .399 .522 .655 .781 .104 .1130 .1.69 .1.69 .1.69 .1.69 .2.21 .2.34 .2.41 .2.41 .2.41 .2.41 .2.41 .3.45 .3.55 	28 42 556 566 570 844 1.68 1.22 1.26 2.10 2.24 2.38 2.552 2.66 2.80 3.50 4.20 5.60 8.40 9.80	15 ct. .30 .45 .60 .75 .90 1.05 1.20 1.35 1.50 1.80 1.95 2.10 2.25 2.40 2.55 2.70 3.75 4.50 6.00 7.50 9.00	16 ct. .32 .48 .64 .80 .96 1.12 1.28 1.44 1.76 1.92 2.08 2.24 2.40 2.56 2.72 2.88 3.04 3.20 4.80 6.40 8.00 9 60	18 ct. -36 -54 -72 -90 1.08 1.26 1.44 1.62 1.80 2.16 2.34 2.52 2.70 2.88 3.06 3.24 3.42 3.60 4.50 5.40 7.20	183/4 ct. 371/3 .561/4 .75 .933/4 1.50/4 1.50/4 1.50/4 2.061/4 2.25 2.433/4 2.621/2 2.811/4 3.375/4 6.883/4 3.75 4.683/4 3.75 4.683/4 3.75 4.683/4 3.75 4.683/4 3.75 4.683/4 3.75 4.683/4 3.75	19 ct. .38 .57 .76 .95 1.14 1.33 1.52 1.71 1.90 2.09 2.28 2.47 2.66 2.85 3.04 3.23 3.42 3.61 3.80 4.75 5.70 7.60 9.50 11.40 13.30	20 ct. .40 .60 .80 1.00 1.20 1.40 1.60 2.00 2.20 2.20 2.80 3.00 3.20 3.40 4.00 6.00 8.00 10.00 11.00 11.00 11.00	21 ct.
Nos 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 40 40 60 70 80	12 ct. 244 .36 .60 .72 .84 .1.20 .1.32 .1.44 .1.56 .1.80 .1.92 .04 .1.32 .1.44 .1.56 .1.80 .1.92 .1.66 .1.92 .1.80 .1.92 .1.92 .1.80 .1.92 .1.92 .1.80 .1.92 .1.92 .1.80 .1.92 .1.80 .1.92 .1.80 .1.92	12½ct. 25 37½ 50 62½ 75 87½ 1.00 1.12½ 1.25 1.37½ 1.50 1.62½ 1.75 1.87½ 2.00 2.12½ 2.50 3.12½ 3.75 5.00 6.750 8.75	13ct. .266 .399 .655 .788 .911 .104 .117 .126 .126	28 42 56 70 84 1.12 1.26 1.40 1.54 1.68 1.82 1.96 2.10 2.24 2.38 2.56 2.80 3.50 4.20 5.60 7.00 8.40 9.80 11.20	15 ct. .30 .45 .60 .75 .90 1.05 1.20 1.35 2.10 2.25 2.40 2.55 2.70 2.85 3.00 3.75 4.50 6.00 9.00 10.0	.32 .48 .64 .80 .96 1.12 1.28 1.44 1.60 1.76 2.08 2.24 2.40 2.58 2.72 2.88 3.04 4.00 4.80 6.40 8.00 6.40 8.00 11.20 11.20	18 ct. -36 -54 -72 -90 1.08 1.26 1.44 1.62 1.80 1.98 2.16 2.34 2.52 2.70 2.88 3.06 3.24 3.42 3.42 3.60 4.50 5.40 7.20 9.00 10.80 12.60 14.40	18% et. 371/2 .561/4 .75 .93% .112/2 .1.311/4 .1.50 .68% .1.871/2 .2.621/2 .3.00 .4.88% .3.01/4 .3.561/4 .3.371/5 .4.68% .5.621/2 .7.50 .9.371/2 .11.25 .13.121/2	19 ct. .38 .57 .76 .95 1.14 1.33 1.52 1.71 1.90 2.09 2.28 2.47 2.46 2.65 3.04 3.23 3.42 3.61 3.80 4.75 5.70 7.60 9.140 13.30	20 ct.	21 ct. .42 .63 .84 1.05 1.26 1.47 1.68 2.10 2.31 2.52 2.73 2.94 3.15 3.36 3.57 3.78 3.78 3.98 4.20 5.25 6.30 8.49 10.50 12.60 14.70 16.80
Nos 2 3 4 5 6 7 8 9 100 11 12 13 14 15 16 17 18 19 20 25 30 40 50 60 70 70	12 ct	12½ct. 28 37½ 50 62½ 75½ 1.00 1.12½ 1.25 1.37½ 1.50 1.62½ 1.75 2.00 2.12½ 2.25 2.37½ 2.50 3.12½ 3.75 5.00 6.25 7.50	13ct. .266 .399 .522 .655 .781 .104 .1130 .1.69 .1.69 .1.69 .1.69 .2.21 .2.34 .2.41 .2.41 .2.41 .2.41 .2.41 .3.45 .3.55 	14 ct. 	15 ct. 	.32 .48 .64 .80 .96 1.12 1.28 1.44 1.60 1.76 2.08 2.24 2.40 2.58 2.72 2.88 3.04 4.00 4.80 6.40 8.00 6.40 8.00 11.20 11.20	18 ct. .36 .54 .72 .90 1.08 1.26 1.44 1.62 2.16 2.34 2.52 2.70 2.88 3.06 3.24 3.42 3.52 5.40 4.50 1.90 1.	18% et. 371/2 561/4 753/4 1.121/2 1.311/4 1.50 1.688/4 2.25 2.433/4 2.621/2 2.811/4 3.00 3.188/4 3.75 4.688/4 5.621/2 7.50 9.371/2 11.25/2 11.25/2 15.00 16.871/2	19 ct. .38 .57 .76 .95 1.14 1.33 1.52 1.71 1.90 2.09 2.28 2.47 2.46 2.65 3.04 3.23 3.42 3.61 3.80 4.75 5.70 7.60 9.140 13.30	20 ct. .40 .60 1.00 1.20 1.40 1.80 2.00 2.20 2.20 3.20	21 ct, -42 -63 -84 1.05 1-26 1.47 1.68 1.89 2.10 2.31 2.52 2.73 2.94 3.15 3.36 3.57 3.78 3.99 4.20 10.50 12.60 14.70 16.80

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. 7	1.54 1.76		1.68 1.92	1.75 2.90	1.82 2.08	1.89 2.16	1.96 2.24	2.03 2.32	2.10 2.40	2.17	2.18%
9	1.98	2.07	2.16	2.25	2.34	2.43	2.52	2.61	2.70	2.79	2.811/4
10	2.20	2.30	2:40	2.50	2.34 2.60	2.43 2.70	2.80	2.90	2.70 3.00	2.79 3.10	2.811/4 3.121/2
11 12	2.42 2.64		2.64 2.88	2.75	2.86 3.12	2.97 3.24	3.08 3.36	3.19 3.48	3.30 3.60	3.41 3.72	3.43%
13	2.86 2.86		3.12	3.00 3.25	3.38	3.51	3.64	3.77	3.90	4.03	4.061/4
14	3.08	3.22	·3.36	3.50	3.64	3.78	3.92	4.06	4.20	4.34	4.371/2 4.683/4
15	3.30		3.60	3.75	3.90	4.05	4.20	4.35	4.50	4.55	4.683/4
16 17	3.52 3.74	3.68	3.84 4.08	4.00 4.25	4.16 4.42	4.32 4.59	4.48 4.76	4.64 4.93	4.80 5.10	4.96 5.27	5.00
18	3.96	4.14	4.32	4.50	4.68	4.86	5.04	5.22	5.40	5.27 5.58	5.621/2
19	4.18	4.37	4.56	4.75	4.94	5.15	5.32	5 51	5.70	5.89	5.621/2 5.933/4
20	4.40 5.50	4.60 5,75	4.80 6.00	5.00 6.25	5.20 6.50	5.40 6.75	5.60 7.00	7.25	6.00 7.25	6.20 7.75	6.25
19 20 25 30 40	6.60	6.90	7.20	.7.50	7.80	8.10	8.40	5.80 7.25 8.70	9.00	9.30	7.81½ 9.37½
40	8.80	9.20	9.60	10.00	10.40	10.80	11.20	11.60	12.00	12.40	12.50
50 60		11.50 13.80	12.00 14.40	12.50 15.00	13.00 15.60	13.50 16.20	14.00 16.80	14.50 17.40	15.00 18.00	15 50 18 60	15.62½ 18.75
. 70		16.10	16.80 19.20	17.50	18.20	18.90	19.60	20.30	21.00	21.70	21.871/2
80		18.40	19.20	20.00	20.80	21.60	22.40	23.20	24.00	24.80	25.00
90 100	19.80 22.00	20.70	21.60 24.00	22.50 25.00	23.40 26.00	24.30 27.00	25.20 28.00	26.10	27.00 30.00	27.90 31.00	28.12 ¹ / ₄ 31.25
Mos											T
-	32 ct.	33ct	33½ct.	34 ct	35 ct	36 ct.	37 ct.	37½ct.	38 ct.	39 ct.	40 ct.
-	32 ct.	33ct	33½ct.	34 ct	35 et	36 ct.	37 ct.	37½ct.	38 ct.	39 ct.	40 ct.
-	32 ct. .64 .96 1.28	33ct .66 .99	33½ct.	34 ct	35 et .70 1.05 1.40	36 ct. .72 1.08 1.44	37 ct. .74 1.11 1.48	37½et. .75 1.12½ 1.50	38 et. .76 1.14 1.52	39 ct. .78 1.17 1.56	.80 1.20 1.60
-	.64 .96 1.28 1.60	.66 .99 1.32 1.05	33½ct. .662/3 1.00 1.33½ 1.662/3	.68 1.02 1.36 1.70	.70 1.05 1.40 1.75	36 ct. .72 1.08 1.44 1.80	37 ct. .74 1.11 1.48 1.85	37½ct75 1.12½ 1.50 1.87½	38 et. .76 1.14 1.52 1.90	39 ct. .78 1.17 1.56 1.95	.80 1.20 1.60 2.00
2 3 4 5 6	32 ct. .64 .96 1.28 1.60 1.92 2.24	.66 .99 1.32 1.05 1.98 2.31	33½ct. .66⅔ 1.00 1.33⅓ 1.66⅔ 2.00	.68 1.02 1.36 1.70 2.04 2.38	.70 1.05 1.40 1.75 2.10 2.45	36 ct. .72 1.08 1.44	37 ct. .74 1.11 1.48	37½ct75 1.12½ 1.50 1.87½ 2.25	38 et. .76 1.14 1.52	39 ct. .78 1.17 1.56 1.95	.80 1.20 1.60
2 3 4 5 6	32 ct. .64 .96 1.28 1.60 1.92 2.24 2.56	.66 .99 1.32 1.05 1.98 2.31 2.64	33½ct. .66⅔ 1.00 1.33⅓ 1.66⅔ 2.00 2.33⅓ 2.66⅔	.68 1.02 1.36 1.70 2.04 2.38 2.72	.70 1.05 1.40 1.75 2.10 2.45 2.80	.72 1.08 1.44 1.80 2.16 2.52 2.88	.74 1.11 1.48 1.85 2.22 2.59 2.96	37½ct. .75 1.12½ 1.50 1.87½ 2.25 2.62½ 3.00	.76 1.14 1.52 1.90 2.28 2.66 3.04	39 ct. .78 1.17 1.56 1.95 2.34 2.73 3.12	.80 1.20 1.60 2.00 2.40 2.80 3.20
2 3 4 5 6	32 ct. .64 .96 1.28 1.60 1.92 2.24 2.56 2.88	33ct .66 .99 1.32 1.05 1.98 2.31 2.64 2.97	33½ct. -66⅔ 1.00 1.33⅓ 1.66⅔ 2.00 2.33⅓ 2.66⅔ 3.00	.68 1.02 1.36 1.70 2.04 2.38 2.72 3.06	.70 1.05 1.40 1.75 2.10 2.45 2.80 3.15	.72 1.08 1.44 1.80 2.16 2.52 2.88 3.24	.74 1.11 1.48 1.85 2.22 2.59 2.96 3.33	37½ct. 75 1.12½ 1.50 1.87½ 2.25 2.62½ 3.00 3.37½	38 ct. .76 1.14 1.52 1.90 2.28 2.66 3.04 3.42	39 ct. .78 1.17 1.56 1.95 2.34 2.73 3.12 3.51	.80 1.20 1.60 2.00 2.40 2.80 3.20 3.60
2 3 4 5 6 7 8 9	32 ct. .64 .96 1.28 1.60 1.92 2.24 2.56 2.88 3.20 3.52	33ct .66 .99 1.32 1.55 1.98 2.31 2.64 2.97 3.30 3.63	33½ct. .662% 1.00 1.33½ 1.662% 2.00 2.33½ 2.662% 3.00 3.33½ 3.662%	34 ct .68 1.02 1.36 1.70 2.04 2.38 2.72 3.06 3.40 3.74	35 ct .70 1.05 1.40 1.75 2.10 2.45 2.80 3.15 3.50 3.85	36 ct. .72 1.08 1.44 1.80 2.16 2.52 2.88 3.24 3.60 3.96	.74 1.11 1.48 1.85 2.22 2.59 2.96	37½ct. 75 1.12½ 1.50 1.87½ 2.25 2.62½ 3.00 3.37½ 3.75	.76 1.14 1.52 1.90 2.28 2.66 3.04 3.42 3.80 4.18	39 ct. .78 1.17 1.56 1.95 2.34 2.73 3.12 3.51 3.90 4.29	.80 1.20 1.60 2.00 2.40 2.80 3.20 3.60 4.00 4.40
2 3 4 5 6 7 8 9	32 ct. .64 .96 1.28 1.60 1.92 2.24 2.56 2.88 3.20 3.52 3.84	33et .66 .99 1.32 1.55 1.98 2.31 2.64 2.97 3.30 3.63 3.96	33½ct. .66⅔ 1.00 1.33⅓ 1.66⅔ 2.00 2.33⅓ 2.66⅔ 3.00 3.33⅓ 3.66⅔ 4.00	34 ct .68 1.02 1.36 1.70 2.04 2.38 2.72 3.06 3.40 3.74 4.08	35 et .70 1.05 1.40 1.75 2.10 2.45 2.80 3.15 3.50 3.85 4.20	36 ct. .72 1.08 1.44 1.80 2.16 2.52 2.88 3.24 3.60 3.96 4.32	37 ct. .74 1.11 1.48 1.85 2.22 2.59 2.96 3.33 3.70 4.07 4.44	37½ct. .75 1.12½ 1.50 1.87½ 2.25 2.62½ 3.00 3.37½ 4.12½ 4.50	38 ct. .76 1.14 1.52 1.90 2.28 2.66 3.04 3.42 3.80 4.18 4.56	39 ct. -78 1.17 1.56 1.95 2.34 2.73 3.12 3.51 3.90 4.29 4.68	.80 1.20 1.60 2.00 2.40 2.80 3.20 3.60 4.00 4.40 4.80
2 3 4 5 6 7 8 9 10 11 12 13	32 ct. .64 .96 1.28 1.60 1.92 2.24 2.56 2.88 3.52 3.52 3.84 4.16	33et .66 .99 1.32 1.05 1.98 2.31 2.64 2.97 3.30 3.63 3.96 4.29	33½ct. .66⅔ 1.00 1.33⅓ 1.66⅔ 2.00 2.33⅓ 2.66⅔ 3.00 3.33⅓ 3.66⅔ 4.00	.68 1.02 1.36 1.70 2.04 2.38 2.72 3.06 3.40 3.74 4.08 4.42	35 et .70 1.05 1.40 1.75 2.10 2.45 2.80 3.15 3.50 3.85 4.20 4.55	36 ct. .72 1.08 1.44 1.80 2.16 2.52 2.88 3.24 3.60 3.96 4.32 4.68	37 ct. .74 1.11 1.48 1.85 2.22 2.59 2.96 3.33 3.70 4.07 4.44 4.81	37½et. 75 1.12½ 1.50 1.87½ 2.25 2.62½ 3.00 3.37½ 4.12½ 4.50 4.87½	38 ct. .76 1.14 1.52 1.90 2.28 2.66 3.04 3.42 3.80 4.18 4.56 4.94	39 ct. -78 1.17 1.56 1.95 2.34 2.73 3.12 3.51 3.90 4.29 4.68 5.07	80 1.20 1.60 2.00 2.40 2.80 3.20 3.60 4.00 4.80 5.20
2 3 4 5 6 7 8 9 10 11 12 13 14 15	32 ct. .64 .96 1.28 1.60 1.92 2.24 2.56 2.88 3.20 3.52 3.84 4.16 4.48 4.48	33ct .66 .99 1.32 1.05 1.98 2.31 2.64 2.97 3.30 3.63 3.96 4.29 4.62 4.95	33½ct. .662/3 1.00 1.33½ 1.662/3 2.00 2.33½ 2.662/3 3.00 3.33½ 4.00 4.33½ 4.662/3 5.00	34 ct .68 1.02 1.36 1.70 2.04 2.38 2.72 3.06 3.40 3.74 4.08 4.42 4.76 5.10	35 ct .70 1.05 1.40 1.75 2.10 2.45 2.80 3.15 3.50 3.85 4.20 4.55 4.90 5.25	36 ct. .72 1.08 1.44 1.80 2.16 2.52 2.88 3.24 3.60 3.96 4.32 4.68 5.04 5.40	37 ct. .74 1.11 1.48 1.85 2.22 2.59 2.96 3.33 3.70 4.07 4.44 4.81 5.18 5.55	37½et. -75 1.12½ 1.50 1.87½ 2.25 2.62½ 3.00 3.37½ 4.12½ 4.50 4.87½ 5.25 5.62½	38 et. .76 1.14 1.52 1.90 2.28 2.66 3.04 3.42 3.80 4.18 4.56 4.94 5.32 5.70	39 ct. -78 1.17 1.56 1.95 2.34 2.73 3.12 3.51 3.90 4.29 4.68 5.07 5.46 5.85	80 1.20 1.60 2.00 2.40 3.20 3.60 4.00 4.80 5.20 5.60 6.00
2 3 4 5 6 7 8 9 10 11 12 13 14 15	32 ct. .64 .96 1.28 1.60 1.92 2.24 2.56 2.88 3.20 3.52 3.84 4.16 4.48 4.80 5.12	33ct6699 1.32 1.55 1.98 2.31 2.64 2.97 3.30 3.63 3.96 4.29 4.62 4.95 5.28	33½ct. .662/3 1.00 1.33½ 1.662/3 2.00 2.33½ 2.662/3 3.00 3.33½ 4.00 4.33½ 4.662/3 5.00	34 ct .68 1.02 1.36 1.70 2.04 2.38 2.72 3.06 3.40 3.74 4.08 4.42 4.76 5.10	35 ct .70 1.05 1.40 1.75 2.10 2.45 2.80 3.15 3.50 3.85 4.20 4.55 4.90 5.25 5.60	36 ct. .72 1.08 1.44 1.80 2.16 2.52 2.88 3.24 3.60 3.96 4.32 4.68 5.04 5.40 5.76	37 ct. .74 1.11 1.48 1.85 2.22 2.59 2.96 3.33 3.70 4.44 4.81 5.18 5.55 5.92	37½et. 75 1.12½ 1.50 1.87½ 2.25 2.62½ 3.00 3.37½ 4.12½ 4.50 4.87½ 5.25 6.60%	38 et. .76 1.14 1.52 1.90 2.28 2.66 3.04 3.42 3.80 4.18 4.56 4.94 5.32 5.70 6.08	39 ct. -78 1.17 1.56 1.95 2.34 2.73 3.12 3.51 3.90 4.29 4.68 5.07 5.46 5.85 6.24	80 1.20 1.60 2.00 2.40 3.20 3.60 4.00 4.80 5.20 5.60 6.00
2 3 4 5 6 7 8 9 10 11 12 13 14 15	32 ct. .64 .96 1.28 1.60 1.92 2.24 2.56 2.88 3.20 3.52 3.84 4.16 4.48 4.80 5.12 5.44	33ct -66 -99 1.32 1.55 1.98 2.31 2.64 2.97 3.30 3.96 4.29 4.62 4.95 5.61	33½ct. 66½ 1.00 1.33⅓ 1.66⅔ 2.00 2.33⅓ 2.66⅔ 3.00 3.33⅓ 4.06⅔ 4.06⅙ 4.33⅓ 5.66⅔ 5.00 5.33⅓ 5.66⅔	34 ct .68 1.02 1.36 1.70 2.04 2.38 2.72 3.06 3.40 3.74 4.08 4.42 4.76 5.10 5.44 5.78	35 ct -70 1.05 1.40 1.75 2.10 2.45 3.50 3.15 3.50 4.20 4.55 4.90 5.25 5.60 5.95	36 ct. .72 1.08 1.44 1.80 2.16 2.52 2.52 2.52 3.24 3.60 3.96 4.32 4.68 5.04 5.40 5.76 6.12	37 et. .74 1.11 1.48 1.85 2.22 2.59 2.596 3.33 3.70 4.07 4.44 4.81 5.18 5.55 5.92 6.29	37½et. 75 1.12½ 1.50 1.87½ 2.25 2.62½ 3.00 3.37½ 4.12½ 4.50 4.87½ 5.25 6.60%	38 ct. .76 1.14 1.52 1.90 2.28 2.66 3.04 3.42 3.80 4.18 4.56 4.94 5.32 5.70 6.08 6.46	39 ct. .78 1.17 1.56 1.95 2.34 2.73 3.51 3.90 4.29 4.68 5.07 5.46 6.63	40 ct. .80 1.20 1.60 2.00 2.40 2.80 3.20 3.60 4.00 4.80 5.20 5.60 6.00 6.00
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	32 ct. .64 .96 1.28 1.60 1.92 2.24 2.56 2.88 3.20 3.52 3.84 4.16 4.48 4.80 5.12 5.44 5.76 6.08	33ct .66 .99 1.32 1.35 1.98 2.31 2.64 2.97 3.30 3.63 3.96 4.29 4.62 4.95 5.28 5.61 5.94 6.27	33½ct. 66½ 1.00 1.33⅓ 1.66⅔ 2.00 2.33⅓ 2.66⅔ 3.00 3.33⅓ 4.06⅔ 4.06⅙ 4.33⅓ 5.66⅔ 5.00 5.33⅓ 5.66⅔	34 ct .68 1.02 1.36 1.70 2.04 2.38 2.72 3.06 3.40 3.74 4.08 4.42 4.76 5.10 5.44 5.78 6.12 6.46	35 ct .70 1.05 1.40 1.75 2.10 2.45 2.80 3.15 3.50 3.85 4.20 4.55 4.90 5.25 5.60 5.95 6.36 6.66	36 ct. .72 1.08 1.44 1.80 2.16 2.52 2.88 3.24 3.60 4.32 4.68 5.04 5.76 6.12 6.48 6.84	37 ct. .74 1.11 1.48 1.85 2.22 2.59 2.96 3.33 3.70 4.44 4.81 5.18 5.55 5.92 6.29 6.66 7.03	37½et. -75 1.12½ 1.50 1.87½ 2.25 2.62½ 3.75½ 4.12½ 4.50 4.87½ 5.25 5.62½ 6.75½ 6.75½	38 ct. .76 1.14 1.52 1.90 2.28 2.66 3.04 3.42 3.80 4.18 4.56 4.94 5.30 6.08 6.46 6.84 7.22	39 ct. .78 1.17 1.56 1.95 2.34 2.73 3.12 3.51 3.90 4.68 5.07 5.46 6.585 6.24 6.63 7.02 7.41	40 ct. -80 1.20 1.60 2.00 2.40 2.80 3.20 4.00 4.40 4.80 5.20 5.60 6.40 6.80 7.20 7.60
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	32 ct. .64 .96 1.28 1.60 1.92 2.24 2.56 2.88 3.20 3.52 3.52 3.52 3.52 5.44 4.80 4.80 5.12 5.44 5.76 6.08 6.40	33ct .66 .99 1.32 1.55 1.98 2.31 2.64 2.97 3.30 3.63 3.96 4.29 4.62 4.95 5.28 5.61 5.94 6.60	33½ct. 66½ 1.00 1.33⅓ 1.66⅔ 2.00 2.33⅓ 2.66⅔ 3.00 3.33⅓ 4.06⅔ 4.06⅙ 4.33⅓ 5.66⅔ 5.00 5.33⅓ 5.66⅔	34 ct .688 1.02 1.36 1.70 2.04 2.38 2.72 3.06 3.40 3.74 4.08 4.42 4.76 5.10 5.44 5.78 6.12 6.46 6.80	35 ct -70 1.05 1.40 1.75 2.10 2.45 2.80 3.85 4.20 3.85 4.90 5.25 5.60 5.95 6.30 6.65 7.00	36 et. .72 1.08 1.44 1.80 2.16 2.52 2.88 3.60 3.96 4.32 3.60 5.76 6.12 6.48 6.84 7.20	37 ct. .74 1.11 1.48 1.85 2.22 2.59 2.96 3.33 3.70 4.07 4.44 5.18 5.55 5.92 6.66 7.03 7.40	37½et. -75 1.12½ 1.50 1.87½ 2.25 2.62½ 3.00 3.37½ 4.12½ 4.50 4.57½ 5.62½ 6.75 7.12½ 7.50	38 ct. .76 1.14 1.52 1.90 2.28 2.66 3.04 3.42 3.80 4.18 4.54 4.54 5.32 5.70 6.08 6.84 7.22 7.60	39 ct. -78 1.17 1.56 1.95 2.34 2.73 3.12 3.51 3.90 4.29 4.66 5.85 6.24 6.63 7.02 7.41 7.80	30 1.20 1.60 2.00 2.40 2.80 3.20 3.60 4.40 4.80 5.20 6.00 6.40 6.80 7.20 7.60 8.00 8.00
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	32 ct. .644 .966 1.28 1.60 1.922 2.24 2.566 2.88 3.20 3.52 3.84 4.16 4.48 5.766 6.08 6.40 8.00 9.60	33ct -66 -99 1.32 1.55 1.98 2.31 2.64 2.97 3.30 3.96 4.29 4.62 4.95 5.28 5.61 5.94 6.27 6.60 8.25	33½ct. 66²/3 1.03 1.33½ 2.00 2.33½ 3.00 3.33½ 4.00 4.33½ 5.00 5.33½ 6.00 6.33½ 6.00 6.33½ 8.33⅓	34 ct .68 1.02 1.36 1.70 2.04 2.38 2.72 3.06 3.40 3.74 4.08 4.42 4.76 5.10 5.44 5.78 6.12 6.46 6.80	35 ct .70 1.05 1.40 1.75 2.10 2.45 2.80 3.15 3.50 3.85 4.20 4.55 5.60 5.95 6.30 6.65 7.00 8.75	36 ct. -72 1.08 1.44 1.80 2.16 2.52 2.88 3.24 3.60 3.96 4.32 4.68 5.40 5.76 6.12 6.48 6.84 7.20 9.00	37 ct. .74 1.11 1.48 1.85 2.22 2.59 2.96 3.33 3.70 4.07 4.44 4.81 5.55 5.92 6.29 6.20 7.40 9.25	37½et. -75 1.12½ 1.50 1.87½ 2.25 2.62½ 3.00 3.37½ 4.50 4.87½ 5.25 5.62½ 6.00 6.37½ 6.75 7.12½ 9.37½	38 ct. .76 1.14 1.52 1.90 2.28 2.66 3.04 3.42 4.56 4.94 5.32 5.70 6.08 6.46 6.84 7.22 7.60 9.50	39 ct. -78 1.17 1.56 1.95 2.34 2.73 3.12 3.51 4.29 4.68 5.07 5.46 6.63 7.02 7.41 7.80 9.75	40 ct. .80 1.20 1.60 2.40 2.40 3.20 3.20 3.40 4.40 4.80 5.20 5.60 6.40 6.80 7.20
23 44 55 66 77 89 10 11 12 13 14 15 16 17 18 19 20 25 30 40	32 ct. .644 .966 1.28 1.60 1.922 2.24 2.566 2.88 3.20 3.52 3.84 4.16 4.48 5.766 6.08 6.40 8.00 9.60	33ct -66 -99 1.32 1.55 1.98 2.31 2.64 2.97 3.30 3.96 4.29 4.62 4.95 5.28 5.61 5.94 6.27 6.60 8.25	33½ct. 66²/3 1.03 1.33½ 2.00 2.33½ 3.00 3.33½ 4.00 4.33½ 5.00 5.33½ 6.00 6.33½ 6.00 6.33½ 8.33⅓	34 ct	35 ct .70 1.05 1.40 1.75 2.10 2.45 2.80 3.15 3.50 4.20 4.55 5.63 6.65 7.00 8.75 10.50 14.00	36 ct. .72 1.08 1.44 1.80 2.16 2.52 2.88 3.24 3.60 4.32 4.68 4.32 4.68 6.84 5.70 6.12 6.48 6.84 7.20 9.00 10.80	37 ct. -74 1.11 1.48 1.85 2.22 2.59 3.33 3.70 4.44 4.81 5.55 5.92 6.66 7.03 7.40 9.25 11.18	37½et.	38 ct. .76 1.14 1.52 1.90 2.28 2.66 3.42 3.80 4.18 4.56 4.94 5.32 5.70 6.08 6.46 6.84 7.22 7.60 9.50 11.40 15.20	39 ct. 1.17 1.56 1.95 2.34 2.73 3.12 3.51 3.90 4.68 5.07 5.46 6.63 7.02 7.41 7.80 9.75 11.70 15.60	40 ct. .80 1.20 2.00 2.40 3.20 3.20 3.60 4.40 4.80 5.20 6.60 6.40 6.80 7.20 7.60 10.00 12.00
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30 40 50 50 50 50 50 50 50 50 50 50 50 50 50	32 ct. .64 .96 1.28 1.60 1.92 2.24 2.56 2.88 3.20 3.52 3.84 4.16 4.48 4.80 5.12 5.44 5.76 6.08 6.40 8.00 9.60 13.80 16.00 16.	33ct66 99 1.32 155 2.31 2.64 2.97 3.30 3.63 3.96 4.62 4.95 5.28 6.27 6.60 9.90 12.20	33½ct. .662% 1.00 1.33½ 1.664% 2.00 2.33½ 2.664% 3.30½ 3.364% 4.00 4.33½ 5.00½ 5.33½ 6.00½ 6.664% 8.33¾ 1.00 13.33¾ 1.00 13.33¾	34 ct .688 1.022 1.366 1.700 2.04 2.383 2.72 2.72 2.72 4.08 4.42 4.76 5.10 5.44 5.78 6.12 6.46 6.80 10.20 13.60 17.00	35 ct .70 1.05 1.40 2.45 2.80 2.85 2.80 3.15 3.50 4.55 4.90 5.25 5.60 6.65 7.00 6.65 7.00 14.00 17.50	36 ct. .72 1.08 1.44 1.80 2.16 2.52 2.88 3.24 3.60 3.96 4.32 5.04 5.76 6.12 6.48 7.20 10.80 11.40 118.00	37 ct. .74 1.11 1.48 1.85 2.22 2.96 3.33 3.70 4.07 4.481 5.18 5.59 6.60 7.03 7.40 9.25 11.10 14.80 18.50	37½et. .75 1.12½ 1.50 1.87½ 2.25 2.62½ 3.00 3.37½ 4.12½ 4.50 6.37½ 5.62½ 6.00 6.37½ 7.12½ 7.50 9.37½ 11.25 15.00	38 ct. .76 1.14 1.52 1.90 2.28 2.66 3.42 3.80 4.18 4.56 4.94 5.32 5.70 6.08 6.46 6.84 7.22 7.60 11.40 15.20 19.90	39 ct. .78 1.17 1.56 1.95 2.34 2.73 3.12 3.51 3.90 4.68 5.07 5.46 6.585 6.24 6.63 7.02 7.41 7.80 9.75 11.70 15.60 19.50	40 ct. 80 1.20 1.60 2.40 2.40 2.80 3.20 4.40 4.80 5.20 6.40 6.80 7.20 6.40 6.80 7.20 10.00
2 3 4 4 5 6 7 8 9 100 111 122 133 144 115 166 117 18 19 20 40 50 60	32 ct. .64 .96 1.28 1.60 1.92 2.24 2.56 2.88 3.20 3.52 3.84 4.16 4.48 4.80 5.12 5.44 5.76 6.08 6.40 8.00 9.60 13.80 16.00 16.	33ct66 99 1.32 155 2.31 2.64 2.97 3.30 3.63 3.96 4.62 4.95 5.28 6.27 6.60 9.90 12.20	33½ct. .662% 1.00 1.33½ 1.664% 2.00 2.33½ 2.664% 3.30½ 3.364% 4.00 4.33½ 5.00½ 5.33½ 6.00½ 6.664% 8.33¾ 1.00 13.33¾ 1.00 13.33¾	34 ct .68 1.02 1.36 1.70 2.04 2.38 2.72 3.06 3.40 3.74 4.08 4.42 4.76 5.10 5.44 5.78 6.12 6.46 6.80 8.50 10.20 13.60 17.00 20.40	35 ct .70 1.05 1.40 1.75 2.10 2.45 3.15 3.50 4.20 4.55 5.60 5.95 6.30 6.30 6.30 6.75 10.50 11.50 11.50 11.50	36 ct. .72 1.08 1.44 1.80 2.16 2.52 2.88 3.24 3.96 4.32 4.32 4.54 5.40 5.76 6.12 6.48 7.20 9.00 14.40 18.00 18.00	37 ct. .74 1.11 1.48 1.85 2.22 2.59 2.96 3.33 3.70 4.44 4.81 5.55 5.92 6.629 6.66 7.40 9.25 1.10 14.80 18.50	37½et. 75 1.12½ 1.50 1.87½ 2.25½ 3.00 3.37½ 3.75½ 4.12½ 4.50 4.87½ 6.00 6.37½ 6.75 7.12½ 7.50 9.37½ 11.25 15.00 18.75	38 ct. .76 1.14 1.52 1.90 2.28 2.66 3.04 3.42 3.80 4.18 4.56 4.94 5.32 5.70 6.08 6.46 6.84 7.22 7.60 9.50 11.40 15.20 19.00 12.80	39 ct. .78 1.17 1.56 1.95 2.34 2.73 3.12 3.51 3.90 4.68 5.07 5.46 6.585 6.24 6.63 7.02 7.41 7.80 9.75 11.70 15.60 19.50	40 ct. 80 1.20 1.60 2.40 2.80 3.60 4.00 4.40 4.80 5.60 6.00 6.00 12.00 12.00 16.00 24.00 24.00
2 3 4 4 5 6 7 8 9 10 111 12 13 14 15 16 17 18 19 20 25 30 40 60 70 80	32 ct. .644 .966 1.28 1.600 1.92 2.24 2.56 2.88 4.80 3.52 3.84 4.80 4.16 4.48 4.80 4.80 9.60 13.80 11.920 19.20 22.40	33ct	33½ct. -66½ 1.00 1.33½ 1.66½ 2.00 2.33½ 3.66½ 3.00½ 3.36½ 4.00 5.33½ 4.66½ 5.66½ 8.33½ 6.66½ 8.33½ 16.66½ 10.00 13.33½	34 ct 1	35 ct	36 ct. .72 1.08 1.44 1.80 2.16 2.52 2.88 3.60 3.96 4.32 4.68 5.04 5.40 5.76 6.12 6.48 7.20 9.00 11.40 11.60 25.20 28.80	37 ct. .74 1.11 1.18 1.85 2.22 2.59 2.96 2.96 4.07 4.44 4.81 5.55 5.92 6.66 7.03 7.40 9.25 11.10 14.80 18.50 18.50	37½et. 75 1.12½ 1.50 1.87½ 2.62½ 3.00 2.25½ 3.75½ 4.12½ 4.50 4.87½ 5.62½ 6.75 7.12½ 7.50 11.25 15.00 18.75 22.50 30.00	38 ct. .766 1.14 1.52 2.286 3.04 3.42 4.18 4.56 6.08 6.46 6.84 7.22 7.60 22.80 22.80 22.80 23.80 3.41 3.42 5.70 6.08 6.46 6.84	39 ct. 7.88 1.17 1.56 1.95 2.34 3.12 2.73 3.12 2.51 3.51 3.90 4.29 4.68 5.85 6.24 6.63 7.02 7.41 7.80 2.3.40 1.5.60 2.3.40 2.3.30 1.20 3.30 3.30 3.30 4.29 3.30 3.30 4.29 3.30 3.30 3.30 4.29 3.30 3.30 3.30 3.30 3.30 3.30 3.30 3.3	40 ct. .80 1.60 2.00 2.40 2.80 3.60 4.40 4.80 6.80 6.80 6.40 6.80 10.00 10.00 10.00 10.00 24.00 28.00 28.00 28.00 32.00
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 5 40 5 60 60 60 60 60 60 60 60 60 60 60 60 60	32 ct. .644 .96 1 .288 .320 2 .244 .256 3 .844 .416 4 .48 .488 .00 9 .18 .00 1 .92 .40 2 .240 .256 .880	33ct	33½ct. -66½ 1.00 1.33½ 1.66½ 2.00 2.33½ 3.66½ 3.00½ 3.36½ 4.00 5.33½ 4.66½ 5.66½ 8.33½ 6.66½ 8.33½ 16.66½ 10.00 13.33½	34 ct .68 1.02 2.04 3.06 1.70 2.04 3.06 3.72 3.06 4.42 4.76 6.12 6.46 6.12 6.46 6.12 6.46 6.12 6.12 6.46 6.12 6.23 8.50	35 ct	36 ct. .72 1.08 1.44 1.80 2.16 2.52 2.88 3.24 3.60 3.96 4.32 4.68 5.04 5.76 6.12 6.48 6.84 7.20 10.80 10.80 10.80 11.800 121.60	37 ct. .74 1.11 1.48 1.85 2.22 2.59 2.96 3.33 3.70 4.07 4.44 4.81 5.18 5.92 6.66 6.29 6.66 7.03 18.50 9.25 6.20 9.25 6.20 9.25 6.20 9.25 6.30 9.33 3.33	37½et. .75 1.12½ 1.50 1.87½ 2.25 2.62½ 3.00 3.37½ 4.12½ 4.50 4.50½ 6.37½ 6.00 6.37½ 7.12½ 7.50 9.37½ 11.25 11.25 11.25 11.25 11.25 11.25 20.25	38 ct. .76 1.14 1.52 1.90 2.28 2.66 3.04 3.42 3.80 4.18 4.56 6.94 7.22 7.60 11.40 15.20 19.00 22.80 26.60	39 ct78 1.17 1.56 1.95 2.34 2.73 3.12 3.51 3.90 4.29 4.68 5.07 5.46 6.24 6.63 7.02 7.41 7.80 9.75 11.70 15.60 19.50 23.40 27.340	40 ct. 80 1.20 1.60 2.00 3.20 3.60 4.00 4.80 5.20 5.60 6.00 7.20 7.60 8.00 10.00 12.00 12.00 28.00 32.00 36.

READY RECKONER.

The first column on the left contains the NUMBER of the Article, and the column on the tops of the Tables the PRICE.

37	49 -4	40 -4	40 -4	44 -4	45 -4	40 -4	400 -4	40 -4	40 -4	FO -4	P9 -4
Nos	41 ct.	42 ct.	43 ct.	44 ct.	45 ct.	46 ct.	47 ct.	48 ct.	49 ct.	50 ct.	51 ct.
2.	.82	.84	.86	.88	.90	.92	.94	.96	.98	1.00	1.02
2 3 4	1.23	1.26	1.29	1.32	1.35	1.38	1.41	1.44	1.47	1.50	1.53
4	1.64	1.68	1.72	1.76	1.80	1.84	1.88	1.92	1.96	2.00	2.04
Б	2.05	2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.45	2.50	2.55
5 6 7	2.46	2.52	2.58	2.64	2.70	2.76	2.80	2.88	2.94	3.00	3.06
7	2.87	2.94	3.01	3.08	3.15	3.22	3.29	3.36	3.43	3.50	3.57
8	3.28	3.36	3.44	3.52	3.60	3.68	3.76	3.84	3.92	4.00	4.08
9	3.69	3.78	3.87	3.96	4.05	4.14	4.23	4.32	4.41	4.50	4.59
10	4.10	4.20	4.30	4.40	4.50	4.60	4.70	4.80	4.90	5.00	5.10
11	4.51	4.62	4.73	4.84	4.95	5.06	5.17	5.28	5.39 5.88	5.50	5.6I
11 12 13	4.92	5.04	5.16	5.28	5.40	5.72	5.64	5.76	5.88	6.00	6.12
13	5.33	5.46	5.59	5.72	5.85	5.98	6.11	6.24	6.37	6.50	6.63
14	5.74	5.88	6.02	6.16	6.30	6.44	6.58	6.72	6.86	7.00	7.14
15	6.15	6.30	6.45	6.60	6.75 7.20	6.90	7.05	7.20 7.68	7.35	7.50	7.65
16 17	6.56 6.97	6.72 7.14	6.88	7.04	7.65	7.36 7.82	7.52 7.99	8.16	7.84 8.33	8.00 8.50	8.16 8.67
10	7.38	7.56	7.31 7.74	7.48 7.92	8.10	0.02	8.46	8.64	8.82	9.00	9.18
18 19	7.79	7.98	8.17	8.30	8.55	8,28 8.74	8.93	9.12	9.31	9.50	9.59
20	8.20	8.40	8.60	8.80	9.00	9.20	9.40	9.60	9.80	10.00	10.20
25	10.25	10.50	10.75	11.00	11.25	11.50	11.75	12.00	12.25	12.50	12.75
25 30	10.25 12.30	12.60	10,75 12.90	13,20	13.50	13.80	14.10	14.40	14.70	15.00	15.30
40 50	16.40	16.80	17.20	17.60	18.00	18.40	18.80	19.20	19.60	20.00	20.40
50	20.50	21.00	21.50	22.00	$\frac{22.50}{27.00}$	23.00	23.50	24.00	24.50	25.00	25.50
60	24.60	25.20	25.80	26.40	27.00	27.60	28.20	28.80	29.40	30.00	30.60
70	28:70	29.40	30.10	30.80	31.50	32.20	32.90	33.00	34.30	35.00	35.70
80	32.80	33.60	34.40	35.20	36.00	36.80	37.60	38.40	39.20	40.00	40.80
90	36.90	37.80	38.70	39.60	40.50	41.40	42.30	43.20	44.10	45.00	45.92
100	41.00	42:00	43.00	44.00	45.00	46.00	47.00	48.00	49.00	50.00	51.00
			20100		-		21100			-	01100
Mod				سند							
Nos	52 ct.	53 ct.	54 ct.	55 ct.	56 ct.	57 ct.	58 ct.	59 ct.	60 ct.	61 ct.	62 ct.
-	52 ct.	53 ct.	54 ct.	55 ct.	56 ct.	57 ct.	58 ct.	59 ct.	60 ct.	61 ct.	62 ct.
-	52 ct.	53 ct.	54 ct.	55 ct.	56 ct.	57 ct.	58 et.	59 ct.	60 ct.	61 et.	62 ct.
-	52 ct.	53 ct.	1.08 1.62 2.16	55 ct. 1.10 1.65 2.20	56 ct.	57 ct.	58 et. 1.16 1.74	59 et. 1.18 1.77	60 ct. 1.20 1.80	61 ct.	62 ct. 1.24` 1.86
-	52 et. 1.04 1.56	53 ct. 1.06 1.59 2.12 2.65	1.08 1.62 2.16 2.70	1.10 1.65 2.20 2.75	56 ct. 1.12 1.68 2.24 2.80	57 ct. 1.14 1.71 2.28 2.85	58 et.	59 ct.	60 ct.	61 et. 1.22 1.83	62 ct.
-	52 et. 1.04 1.56 2.08 2.60 3.12	53 ct. 1.06 1.59 2.12 2.65 3.18	1.08 1.62 2.16 2.70 3.24	55 ct. 1.10 1.65 2.20 2.75 3.30	56 ct. 1.12 1.68 2.24 2.80 3.36	57 ct. 1.14 1.71 2.28 2.85 3.42	58 et. 1.16 1.74 2.32 2.90 3.48	59 et. 1.18 1.77 2.36 2.95 3.54	1.20 1.80 2.40 3.00 3.60	1.22 1.83 2.44 3.05 3.66	62 ct. 1.24 1.86 2.48 3.10 3.72
-	52 ct. 1.04 1.56 2.08 2.60 3.12 3.64	1.06 1.59 2.12 2.65 3.18 3.71	1.08 1.62 2.16 2.70 3.24 3.78	55 ct. 1.10 1.65 2.20 2.75 3.30 3.85	56 ct. 1.12 1.68 2.24 2.80 3.36 3.92	57 ct. 1.14 1.71 2.28 2.85 3.42 3.99	58 et. 1.16 1.74 2.32 2.90 3.48 4.06	59 ct. 1.18 1.77 2.36 2.95 3.54 4.13	60 ct. 1.20 1.80 2.40 3.00 3.60 4.20	1.22 1.83 2.44 3.05 3.66 4.27	62 ct. 1.24 \ 1.86 2.48 3.10 3.72 4.34
-	52 ct. 1.04 1.56 2.08 2.60 3.12 3.64 4.16	53 ct. 1.06 1.59 2.12 2.65 3.18 3.71 4.24	1.08 1.62 2.16 2.70 3.24 3.78 4.32	55 ct. 1.10 1.65 2.20 2.75 3.30 3.85 4.40	56 ct. 1.12 1.68 2.24 2.80 3.36 3.92 4.48	57 ct. 1.14 1.71 2.28 2.85 3.42 3.99 4.56	1.16 1.74 2.32 2.90 3.48 4.06 4.64	59 ct. 1.18 1.77 2.36 2.95 3.54 4.13 4.72	1.20 1.80 2.40 3.00 3.60 4.20 4.80	1.22 1.83 2.44 3.05 3.66 4.27 4.88	62 ct. 1.24 \ 1.86 \ 2.48 \ 3.10 \ 3.72 \ 4.34 \ 4.96
-	52 ct. 1.04 1.56 2.08 2.60 3.12 3.64 4.16 4.68	1.06 1.59 2.12 2.65 3.18 3.71 4.24 4.77	1.08 1.62 2.16 2.70 3.24 3.78 4.32 4.86	55 ct. 1.10 1.65 2.20 2.75 3.30 3.85 4.40 4.95	56 ct. 1.12 1.68 2.24 2.80 3.36 3.92 4.48 5.04	57 ct. 1.14 1.71 2.28 2.85 3.42 3.99 4.56 5.13	58 ct. 1.16 1.74 2.32 2.90 3.48 4.06 4.64 5.22	59 ct. 1.18 1.77 2.36 2.95 3.54 4.13 4.72 5.31	1.20 1.80 2.40 3.00 3.60 4.20 4.80 5.40	1.22 1.83 2.44 3.05 3.66 4.27 4.88 5.49	62 ct. 1.24 1.86 2.48 3.10 3.72 4.34 4.96 5.58
-	1.04 1.56 2.08 2.60 3.12 3.64 4.16 4.68 5.20	53 ct. 1.06 1.59 2.12 2.65 3.18 3.71 4.24 4.77 5.30	1.08 1.62 2.16 2.70 3.24 3.78 4.32 4.86 5.40	55 et. 1.10 1.65 2.20 2.75 3.30 3.85 4.40 4.95 5.50	56 ct. 1.12 1.68 2.24 2.80 3.36 3.92 4.48 5.04 5.60	57 ct. 1.14 1.71 2.28 2.85 3.42 3.99 4.56 5.13 5.70	58 et. 1.16 1.74 2.32 2.90 3.48 4.06 4.64 5.22 5.80	59 ct. 1.18 1.77 2.36 2.95 3.54 4.13 4.72 5.31 5.90	1.20 1.80 2.40 3.00 3.60 4.20 4.80 5.40 6.00	1.22 1.83 2.44 3.05 3.66 4.27 4.88 5.49 6.10	62 ct. 1.24 1.86 2.48 3.10 3.72 4.34 4.96 5.58 6.20
-	52 ct. 1.04 1.56 2.08 2.60 3.12 3.64 4.16 4.68 5.20 5.72	53 ct. 1.06 1.59 2.12 2.65 3.18 3.71 4.24 4.77 5.30 5.83	1.08 1.62 2.16 2.70 3.24 3.78 4.32 4.86 5.40 5.94	55 ct. 1.10 1.65 2.20 2.75 3.30 3.85 4.40 4.95 5.50 6.05	56 ct. 1.12 1.68 2.24 2.80 3.36 3.92 4.48 5.04 5.60 6.16	57 ct. 1.14 1.71 2.28 2.85 3.42 3.99 4.56 5.13 5.70 6.27	58 ct. 1.16 1.74 2.32 2.90 3.48 4.06 4.64 5.22 5.80 6.38	59 ct. 1.18 1.77 2.36 2.95 3.54 4.13 4.72 5.31 5.90 6.49	1.20 1.80 2.40 3.00 3.60 4.20 4.80 5.40 6.00 6.60	1.22 1.83 2.44 3.05 3.66 4.27 4.88 5.49 6.10 6.71	62 ct. 1.24 1.86 2.48 3.10 3.72 4.34 4.96 5.58 6.20 6.82
-	52 ct. 1.04 1.56 2.08 2.60 3.12 3.64 4.16 4.68 5.20 5.72 6.24	53 ct. 1.06 1.59 2.12 2.65 3.18 3.71 4.24 4.77 5.30 5.83 6.36	54 ct. 1.08 1.62 2.16 2.70 3.24 3.78 4.32 4.86 5.40 5.94 6.48	55 ct. 1.10 1.65 2.20 2.75 3.30 3.85 4.40 4.95 5.50 6.05 6.60	56 ct. 1.12 1.68 2.24 2.80 3.36 3.92 4.48 5.60 6.16 6.72	57 ct. 1.14 1.71 2.28 2.85 3.42 3.99 4.56 5.13 5.70 6.27 6.84	58 ct. 1.16 1.74 2.32 2.90 3.48 4.06 4.64 5.22 5.80 6.38 6.96	59 ct. 1.18 1.77 2.36 2.95 3.54 4.13 4.72 5.31 5.90 6.49 7.08	1.20 1.80 2.40 3.00 3.60 4.20 4.80 5.40 6.60 7.20	61 et. 1.22 1.83 2.44 3.05 3.66 4.27 4.88 5.49 6.10 6.71 7.32	62 ct. 1.24 1.86 2.48 3.10 3.72 4.34 4.96 5.58 6.20 6.82 7.44
-	52 ct. 1.04 1.56 2.08 2.60 3.12 3.64 4.16 4.16 5.20 5.72 6.24 6.76	53 ct. 1.06 1.59 2.12 2.65 3.18 3.71 4.24 4.77 5.30 5.83 6.36 6.89	54 ct. 1.08 1.62 2.16 2.70 3.24 3.78 4.32 4.86 5.40 5.94 6.48 7.02	55 ct. 1.10 1.65 2.20 2.75 3.30 3.85 4.40 4.95 5.50 6.60 7.15	56 ct. 1.12 1.68 2.24 2.80 3.36 3.92 4.48 5.60 6.16 6.72 7.28	57 ct. 1.14 1.71 2.28 2.85 3.42 3.99 4.56 5.13 5.70 6.27 6.84 7.41	58 ct. 1.16 1.74 2.32 2.90 3.48 4.06 4.64 5.22 5.80 6.38 6.96 7.54	59 ct. 1.18 1.77 2.36 2.95 3.54 4.13 4.72 5.31 5.90 6.49 7.08 7.67	60 ct. 1.20 1.80 2.40 3.00 3.60 4.20 4.80 5.40 6.60 7.20 7.80	61 et. 1.22 1.83 2.44 3.05 3.66 4.27 4.88 5.49 6.10 6.71 7.32 7.93	62 ct. 1.24 1.86 2.48 3.10 3.72 4.34 4.96 5.58 6.20 6.82 7.44 8.06
2 3 4 5 6 7 8 9 10 11 12 13 14	52 ct. 1.04 1.56 2.08 2.60 3.12 3.64 4.16 4.68 5.20 5.72 6.24 6.76 7.28	53 ct. 1.06 1.59 2.12 2.65 3.18 3.71 4.24 4.77 5.30 5.83 6.36 6.89 7.42	1.08 1.62 2.16 2.70 3.24 3.78 4.32 4.86 5.40 5.94 6.48 7.02 7.56	55 ct. 1.10 1.65 2.20 2.75 3.30 3.85 4.40 4.95 5.50 6.60 7.15 7.70	56 ct. 1.12 1.68 2.24 2.80 3.36 3.92 4.48 5.60 6.16 6.72 7.28 7.84	57 ct. 1.14 1.71 2.28 2.85 3.42 3.99 4.56 5.13 5.70 6.84 7.41 7.98	58 ct. 1.16 1.74 2.32 2.90 3.48 4.06 4.64 5.22 5.80 6.38 6.96 7.54 8.12	59 ct. 1.18 1.77 2.36 2.95 3.54 4.72 5.31 5.90 6.49 7.08 7.67 8.26	60 ct. 1.20 1.80 2.40 3.00 3.60 4.20 4.80 5.40 6.00 6.60 7.20 7.80 8.40	61 et. 1.22 1.83 2.44 3.05 3.66 4.27 4.88 5.49 6.10 6.71 7.32 7.93 8.54	62 ct. 1.24 \ 1.86 2.48 3.10 3.72 4.34 4.96 5.58 6.20 6.82 7.44 8.06 8.68
2 3 4 5 6 7 8 9 10 11 12 13 14 15	52 ct. 1.04 1.56 2.08 2.60 3.12 3.64 4.16 4.68 5.20 5.72 6.74 6.76 7.28 7.80	53 ct. 1.06 1.59 2.12 2.65 3.18 3.71 4.24 4.77 5.30 5.83 6.36 6.39 7.42 7.95	1.08 1.62 2.16 2.70 3.24 3.78 4.32 4.86 5.40 5.94 6.48 7.02 7.56 8.10	55 et. 1.10 1.65 2.20 2.75 3.30 3.85 4.40 4.95 5.50 6.05 6.60 7.15 7.70 8.25	56 ct. 1.12 1.68 2.24 2.80 3.36 3.92 4.48 5.60 6.16 6.72 7.28 7.84 8.40	57 ct. 1.14 1.71 2.28 2.85 3.42 3.99 4.56 5.13 5.70 6.27 6.84 7.41 7.98 8.55	1.16 1.74 2.32 2.90 3.48 4.06 4.64 5.22 5.80 6.38 6.96 7.54 8.12 8.70	59 ct. 1.18 1.77 2.36 2.95 3.54 4.13 4.72 5.31 5.90 6.49 7.08 7.68 7.68 7.82 8.26 8.85	60 ct. 1.20 1.80 2.40 3.00 3.60 4.20 4.80 6.00 6.60 7.20 7.80 8.40 9.00	61 ct. 1.22 1.83 2.44 3.05 3.66 4.27 4.88 5.49 6.10 6.71 7.32 7.93 8.54 9.15	62 ct. 1.24 1.86 2.48 3.10 3.72 4.34 4.96 5.58 6.20 6.82 7.44 8.06 8.68 9.30
2 3 4 5 6 7 8 9 10 11 12 13 14 15	1.04 1.56 2.08 2.60 3.12 3.64 4.16 4.68 5.20 5.72 6.24 6.76 7.28 7.80 8.32	53 ct. 1.06 1.59 2.12 2.65 3.18 3.71 4.24 4.77 5.30 5.83 6.36 6.89 7.42 7.95 8.48	1.08 1.62 2.16 2.70 3.24 3.78 4.32 4.86 5.40 5.94 6.48 7.02 7.56 8.10 8.64	55 ct. 1.10 1.65 2.20 2.75 3.30 3.85 4.40 4.95 5.50 6.60 7.15 7.70 8.25 8.80	56 ct. 1.12 1.68 2.24 2.80 3.36 3.92 4.48 5.04 5.60 6.16 6.72 7.28 7.84 8.40 8.96	57 ct. 1.14 1.71 2.28 3.42 3.99 4.56 5.13 5.70 6.27 6.84 7.41 7.98 8.55 9.12	1.16 1.74 2.32 2.90 3.48 4.06 4.64 5.22 5.80 6.38 6.96 7.54 8.12 8.70 9.28	59 ct. 1.18 1.77 2.36 2.95 3.54 4.13 4.72 5.30 6.49 7.08 7.67 8.26 8.85 9.44	60 ct. 1.20 1.80 2.40 3.00 3.60 4.20 4.80 5.40 6.60 7.20 7.80 8.40 9.00 9.60	61 et. 1.22 1.83 2.44 3.05 3.66 4.27 4.88 5.49 6.10 6.71 7.32 7.93 8.54 9.15 9.76	62 ct. 1.24 1.86 2.48 3.10 3.72 4.34 4.96 5.58 6.20 6.82 7.44 8.06 8.68 9.30 9.92
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	52 ct. 1.04 1.56 2.08 2.60 3.12 3.64 4.16 4.68 5.20 5.72 6.24 6.76 7.28 7.80 8.32 8.84	53 ct. 1.06 1.59 2.12 2.65 3.18 3.71 4.24 4.77 5.30 5.83 6.36 6.89 7.42 7.95 8.48 9.01	1.08 1.62 2.16 2.70 3.24 3.78 4.32 4.86 5.40 5.94 6.48 7.02 7.56 8.10 8.64	55 ct. 1.10 1.65 2.20 2.75 3.30 3.85 4.40 4.95 5.50 6.06 7.15 7.70 8.25 8.80 9.35	56 ct. 1.12 1.68 2.24 2.80 3.36 3.92 4.48 5.60 6.16 6.72 7.28 7.84 8.96 9.52	57 ct. 1.14 1.71 2.28 2.85 3.42 3.99 4.56 5.13 5.70 6.27 7.41 7.98 8.55 9.12 9.12	58 ct. 1.16 1.74 2.32 2.90 3.48 4.04 5.22 5.80 6.38 6.38 6.7.54 8.12 8.70 9.28 9.86	59 ct. 1.18 1.77 2.36 2.95 3.54 4.13 5.90 6.49 7.67 8.26 8.85 8.44 10.03	60 ct. 1.20 1.80 2.40 3.00 3.60 4.20 5.40 6.00 6.60 7.20 7.80 8.40 9.00 9.60 10.20	61 ct. 1.22 1.83 2.44 3.05 3.66 4.27 4.88 5.49 6.10 6.71 7.32 7.93 8.54 9.15 10.37	62 ct. 1.24 1.86 2.48 3.10 3.72 4.34 4.96 5.58 6.20 6.82 7.44 8.06 8.68 9.30 9.92 10.54
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	1.04 1.56 2.08 2.60 3.12 3.64 4.16 4.68 5.20 5.72 6.24 6.76 7.28 7.80 8.32	53 ct. 1.06 1.59 2.12 2.65 3.18 3.71 4.24 4.77 5.30 6.36 6.89 7.42 7.95 8.48 9.01 9.54 10.07	1.08 1.62 2.16 2.70 3.24 3.78 4.32 4.86 5.40 5.94 6.48 7.02 7.56 8.10 8.64	55 ct. 1.10 1.65 2.20 2.75 3.30 3.85 4.40 4.95 5.50 6.60 7.15 7.70 8.25 8.80	56 ct. 1.12 1.68 2.24 2.80 3.36 3.92 4.48 5.04 5.60 6.16 6.72 7.28 7.84 8.40 8.96	57 ct. 1.14 1.71 2.28 2.85 3.42 3.99 4.56 5.13 5.70 6.27 6.84 7.41 7.98 8.55 9.12 9.12 9.10	1.16 1.74 2.32 2.90 3.48 4.06 4.64 5.22 5.80 6.38 6.96 7.54 8.12 8.70 9.28	59 ct. 1.18 1.77 2.36 2.95 3.54 4.13 4.72 5.30 6.49 7.08 7.67 8.26 8.85 9.44	60 ct. 1.20 1.80 2.40 3.00 4.20 4.80 5.40 6.60 7.20 7.80 9.60 10.20 10.20	61 ct. 1.22 1.83 2.44 3.05 3.66 4.27 4.88 5.49 6.71 7.32 7.93 8.54 9.15 9.76 10.37 10.98	62 ct. 1.24 1.86 2.48 3.10 3.72 4.34 4.96 6.20 7.44 8.06 8.68 9.30 9.92 10.54 11.16
23 44 5 66 7 8 9 10 11 12 13 14 15 16 17 18 19 20	52 ct. 1.04 1.56 2.08 2.60 3.12 3.64 4.16 4.68 5.20 5.72 6.24 6.76 7.28 7.80 8.32 8.84 9.36 9.88 10.40	53 ct. 1.06 1.59 2.12 2.65 3.18 3.71 4.24 4.77 5.30 5.83 6.36 6.89 7.42 7.95 8.48 9.01 9.54	54 ct. 1.08 1.62 2.16 2.70 3.24 3.78 4.32 4.86 5.40 5.94 6.48 7.02 7.56 8.10 8.64 9.18 9.72 10.26 10.80	55 ct. 1.10 1.65 2.20 2.75 3.30 3.85 5.50 6.60 6.60 6.60 7.15 7.70 8.25 8.80 9.35 9.90	56 ct. 1.12 1.68 2.24 2.80 3.36 3.92 4.48 5.04 5.60 6.72 7.28 7.84 8.40 8.96 9.52 10.08	57 ct. 1.14 1.71 2.28 2.85 3.42 3.99 4.56 5.13 5.70 6.27 7.41 7.98 8.55 9.12 9.12	58 ct. 1.16 1.74 2.32 2.90 3.48 4.06 4.64 5.22 5.80 6.38 6.96 7.54 8.12 8.70 9.28 6.10.44	59 ct. 1.18 1.77 2.36 2.95 3.54 4.13 4.72 5.31 5.90 6.49 7.08 7.08 7.68 7.68 9.44 10.03 10.62	60 ct. 1.20 1.80 2.40 3.00 3.60 4.20 5.40 6.00 6.60 7.20 7.80 8.40 9.00 9.60 10.20	61 ct. 1.22 1.83 2.44 3.05 4.27 4.88 5.49 6.10 6.71 7.32 7.93 8.54 9.15 9.76 10.37 10.98	62 ct. 1.24 1.86 2.48 3.10 3.72 4.34 4.96 5.58 6.20 6.82 7.44 8.06 8.68 9.30 9.92 10.54
23 45 66 78 89 10 11 12 13 14 15 16 17 18 19 20	52 ct. 1.04 1.56 2.08 2.60 3.12 3.64 4.16 4.68 5.20 5.72 6.76 7.28 7.80 8.32 7.80 8.32 9.88 10.40 13.00	53 ct. 1.06 1.59 2.12 2.65 3.18 3.71 4.24 4.77 5.30 5.83 6.36 6.89 7.42 7.95 8.48 9.01 9.54 10.07 10.60 13.25	54 ct. 1.08 1.62 2.16 2.70 3.24 3.78 4.32 4.86 5.40 5.94 6.48 7.02 7.56 8.10 8.64 9.18 9.72 10.26 10.80 13.50	55 ct. 1.10 1.65 2.20 2.75 3.30 3.85 4.40 4.95 5.50 6.05 6.05 7.15 7.70 8.25 8.80 9.35 9.90 10.45 11.00 13.75	56 ct. 1.12 1.68 2.24 2.80 3.36 3.92 4.48 5.60 6.16 6.72 7.28 8.40 8.96 9.52 10.08 10.64 11.20 14.00	57 ct. 1.14 1.71 2.28 2.85 3.42 3.99 4.56 5.13 5.70 6.27 6.84 7.41 7.98 8.55 9.12 9.69 10.26 10.83 11.40 14.25	58 ct. 1.16 1.74 2.32 2.90 3.48 4.06 4.64 5.22 5.80 6.38 6.96 7.54 8.12 8.70 9.28 9.28 9.04 11.60 11.60 14.50	59 ct. 1.18 1.77 2.36 2.95 3.54 4.13 4.72 4.73 4.70 6.49 7.08 7.67 8.26 8.85 9.44 10.62 11.21 11.80 14.75	60 ct. 1.20 1.80 2.40 3.00 3.60 4.20 4.80 5.40 6.00 6.60 7.20 7.80 8.40 9.00 9.60 10.20 11.40 12.00 15.00	61 ct. 1.22 1.83 2.44 3.05 3.66 4.27 4.88 5.49 6.10 7.32 7.93 8.54 9.15 9.76 10.37 10.98 11.59 12.20 15.25	62 ct. 1.24 1.86 2.48 3.10 3.72 4.34 4.96 5.58 6.20 6.82 7.44 8.06 8.68 9.30 9.92 10.54 11.18
23 34 45 66 78 99 10 111 12 13 14 15 16 17 18 19 20 25 30	52 ct. 1.04 1.56 2.08 2.60 3.12 3.64 4.16 4.16 5.20 5.72 6.24 6.76 7.28 7.80 9.88 10.40 13.00 15.60	53 ct. 1.06 1.59 2.12 2.65 3.18 3.71 4.24 4.77 5.30 5.83 6.36 6.89 7.42 7.95 8.48 9.01 9.01 9.01 10.07 10.06 13.25 15.90 15.90	54 ct. 1.08 1.62 2.16 2.70 3.24 3.78 4.32 4.86 5.40 5.94 6.48 7.02 7.56 8.64 9.18 9.72 10.26 10.80 13.50 16.20	55 ct. 1.10 1.65 2.20 2.75 3.30 3.85 4.40 4.95 5.50 6.05 6.05 6.05 8.25 8.80 9.35 9.90 10.45 11.00 13.75 16.50	5.6 ct. 1.12 1.68 2.24 2.80 3.36 3.92 4.48 5.04 5.60 6.16 6.72 7.28 7.84 8.40 8.96 9.52 10.08 11.20 14.00 14.00 16.80	57 ct. 1.14 1.71 2.28 2.85 2.85 3.42 3.99 4.56 5.70 6.27 6.84 7.41 7.98 8.55 9.12 9.69 10.26 10.83 11.40 14.25 17.10	58 ct. 1.16 1.74 2.32 2.90 3.48 4.06 4.64 5.22 5.80 6.38 6.38 7.54 8.12 9.28 9.86 9.84 11.02 11.60 14.50 17.40	59 ct. 1.18 1.77 2.36 2.95 3.54 4.13 4.72 5.31 5.90 6.49 7.67 8.26 9.44 10.03 10.62 11.21 11.80 14.75 17.70	60 ct. 1.20 1.80 2.40 3.00 4.20 4.20 4.80 6.60 6.60 7.20 7.80 8.40 9.60 10.20 10.80 11.40 12.00 15.00 18.00	61 et. 1.22 1.83 2.44 3.05 3.66 4.27 4.88 5.49 6.10 6.71 7.32 7.93 8.54 9.15 9.76 10.37 10.98 11.59 12.20 15.25 18.30	62 ct. 1.24 \ 1.86 \ 2.48 \ 3.10 \ 3.72 \ 4.96 \ 5.58 \ 6.20 \ 6.82 \ 7.44 \ 8.06 \ 8.68 \ 9.30 \ 9.92 \ 10.54 \ 11.16 \ 11.78 \ 12.40 \ 15.50 \ 18.60
23 44 55 66 78 89 10 111 122 133 144 155 166 177 188 199 205 250 40	52 ct. 1.04 1.56 2.08 2.60 3.12 3.64 4.168 5.20 5.72 6.24 6.76 7.28 7.80 8.32 8.84 9.36 9.88 10.40 13.00 15.60 20.80	53 ct. 1.06 1.59 2.12 2.65 3.18 3.71 4.24 4.77 5.30 5.83 6.36 6.89 7.42 7.95 8.48 9.01 9.54 10.07 10.60 13.25 15.90 15.9	54 ct. 1.08 1.62 2.16 2.70 3.24 3.78 4.32 4.86 5.40 5.94 6.48 7.02 7.56 8.10 8.64 9.18 9.72 10.26 10.80 13.50 16.20 21.60	55 ct. 1.10 1.65 2.20 2.75 3.30 3.85 4.40 4.95 5.50 6.05 6.05 6.05 8.25 8.80 9.35 9.90 10.45 11.00 13.75 16.50	56 ct. 1.12 1.68 2.24 2.80 3.36 3.92 4.48 5.04 5.60 6.16 6.72 7.28 8.96 9.52 10.08 10.64 11.20 14.00 16.80 22.40	57 ct. 1.14 1.71 2.28 3.42 3.99 4.56 5.13 5.70 6.27 6.84 7.41 7.98 8.55 9.12 9.69 10.26 10.26 10.42 11.40 14.25 17.10 22.80	58 ct. 1.16 1.74 2.32 2.90 3.48 4.06 4.64 5.22 5.80 6.38 6.96 7.54 8.12 8.70 9.28 9.86 10.44 11.02 11.60 14.50 17.40 23.20 23.20 23.20 23.20 24.06 25.20 26.20 26.20 27.	59 ct. 1.18 1.77 2.36 2.95 3.54 4.12 5.31 5.90 7.08 7.68 7.69 8.26 8.85 9.44 10.03 10.62 11.21 11.80 14.75 17.70 23.60	60 ct. 1.20 1.80 2.40 3.00 3.60 4.20 4.80 5.40 6.60 7.20 7.80 9.00 9.60 10.20 10.80 11.40 12.00 15.00 18.00 24.00	61 ct. 1.22 1.83 2.44 3.05 3.66 4.27 4.88 5.49 6.10 7.32 7.32 7.93 8.54 9.15 9.76 10.37 10.98 11.59 12.20 15.25 18.30 24.42	62 ct. 1.24 1.86 2.48 3.10 3.72 4.34 4.96 5.58 6.20 6.82 7.44 8.06 8.68 9.30 9.92 10.54 11.16 11.74 11.74 15.50 18.60 24.80
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30 40 50	52 ct. 1.04 1.56 2.08 2.60 3.12 3.64 4.16 4.68 5.72 6.24 6.76 7.28 8.32 8.32 8.32 8.32 9.36 9.88 10.40 13.00 15.60 20.80 26.80 26.80 26.80 26.80	53 ct. 1.06 1.59 2.12 2.65 3.18 3.71 4.24 4.77 5.30 5.83 6.36 6.89 7.42 7.95 8.48 9.01 10.07 10.60 13.25 15.90 21.10 26.50	54 ct. 1.08 1.62 2.16 2.70 3.24 3.78 4.32 4.86 5.40 5.94 6.48 7.02 7.56 8.10 8.64 9.18 9.72 10.26 10.80 13.50 16.20 21.60 27.00	55 ct. 1.10 1.65 2.20 2.75 3.30 3.85 5.50 6.05 6.05 7.15 7.70 8.25 8.80 9.35 9.35 11.00 13.75 16.50 22.00 27.50	56 ct. 1.12 1.68 2.24 2.80 3.36 3.92 4.48 5.60 6.16 6.72 7.28 7.84 8.40 8.96 9.522 10.08 10.64 11.20 14.00 16.80 22.40 28.00	57 ct. 1.14 1.71 2.28 3.42 3.99 4.56 5.13 5.70 6.84 7.41 7.98 8.55 9.12 9.69 10.26 10.83 11.40 14.25 17.10 22.80	58 ct. 1.16 1.74 2.32 2.90 3.48 4.64 5.20 6.38 6.96 6.754 8.12 8.70 9.28 9.86 10.44 11.02 11.60 14.50 17.40 23.20 29.00 29.00 29.00 29.00 29.00 29.00 20.00	59 ct. 1.18 1.77 2.36 2.95 3.54 4.72 5.31 4.72 5.30 6.49 7.67 8.26 9.44 10.03 10.62 11.21 11.80 14.75 17.70 23.60 29.50	60 ct. 1.20 1.80 2.40 3.00 3.60 4.20 6.00 6.60 7.20 9.60 10.20 10.80 11.40 12.00 18.00 24.00 30.00	61 ct. 1.22 1.83 2.44 3.05 3.66 4.27 4.88 5.49 6.10 6.71 7.32 8.54 9.76 10.37 10.37 10.37 10.37 11.59 12.20 15.25 18.30 24.42 24.42 30.53	62 ct. 1.24 1.86 2.48 3.10 4.34 4.96 6.20 7.44 8.06 8.68 9.30 9.92 10.54 11.16 11.78 12.40 15.50 18.60 24.80 31.00 31.00
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30 40 60	52 ct. 1.04 1.56 2.08 2.60 3.12 3.64 4.16 4.68 5.20 5.72 6.76 7.28 7.80 8.32 8.84 9.36 9.88 10.40 13.00 15.60 20.80 26.00 31.20	53 ct. 1.06 1.59 2.12 2.65 3.18 3.71 4.24 4.77 5.30 6.36 6.89 7.42 7.95 8.48 9.01 9.54 10.07 10.60 13.25 15.90 21.10 26.50 31.80 31.	54 ct. 1.08 1.62 2.16 2.70 3.24 3.78 4.32 4.86 5.40 5.94 6.48 7.02 7.56 8.10 8.64 9.18 9.72 10.26 10.2	55 ct. 1.10 1.65 2.20 2.75 3.30 3.85 5.50 6.05 6.05 6.60 7.15 7.70 8.25 8.80 9.35 9.90 10.45 11.00 13.75 16.50 22.00 27.50 33.00 30.00 30.00 30.00 30.00 30.00 30.00 30.	56 ct. 1.12 1.68 2.24 2.80 3.92 4.48 5.04 5.60 6.16 6.72 7.28 7.84 8.96 9.52 10.08 11.00 14.00 14.00 16.80 22.40 28.00 33.60 28.00 28.00 33.60 39.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 3	57 ct. 1.14 1.71 2.28 2.85 3.42 3.99 4.56 5.13 5.70 6.27 6.84 7.41 7.98 8.55 9.12 9.69 10.26 11.40 14.25 17.10 22.80 28.50 34.20	58 ct. 1.16 1.74 2.32 2.90 3.48 4.06 4.64 5.80 6.38 6.96 7.54 8.12 8.70 9.28 9.86 10.44 11.60 14.50 17.40 23.20 29.00 29.00 34.80 34	59 ct. 1.18 1.77 2.36 2.95 3.54 4.13 4.72 5.31 5.90 7.08 7.08 7.08 7.08 10.03 10.62 11.21 11.80 14.75 17.70 23.60 29.50 35.40	60 ct. 1.20 1.80 2.40 3.00 3.60 4.20 6.60 7.20 7.20 7.20 7.80 8.40 9.00 9.60 10.20 11.40 12.00 15.00 18.00 24.00 30.00 3	61 ct. 1.22 1.83 2.44 3.05 3.66 4.27 4.88 5.49 6.10 6.71 7.32 7.32 7.32 7.10 9.15 10.37 10.98 11.59 12.20 15.25 18.30 24.42 30.50 26.60	62 ct. 1.24 1.86 2.48 3.10 3.72 4.34 4.96 5.58 6.20 6.82 7.44 8.06 8.68 9.30 9.92 10.54 11.16 11.78 12.40 15.50 18
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30 40 60	52 ct. 1.04 1.56 2.08 3.12 4.16 4.68 5.20 6.24 6.76 6.72 6.24 6.78 9.36	53 ct. 	54 ct. 1.08 1.62 2.16 2.70 3.24 3.78 4.32 4.86 5.94 6.48 7.02 7.56 8.10 8.64 9.18 9.72 10.26 10.80 13.50 16.20 21.60 27.00 32.40 37.80	55 ct. 1.10 1.65 2.20 2.75 3.30 3.85 4.40 4.95 5.50 6.60 7.15 7.70 8.25 8.80 9.35 9.90 10.45 11.00 27.50 33.00 27.50 33.50 38.50 33.	56 ct. 1.12 1.68 2.24 2.80 3.36 3.92 4.48 5.04 5.60 6.16 6.72 7.28 7.84 8.40 8.96 9.52 10.08 10.64 11.20 14.00 16.80 22.40 28.00 33.60 33.60 33.90	57 ct. 1.14 1.71 2.28 2.85 3.42 3.99 4.56 5.13 5.70 6.27 6.84 7.41 7.98 9.69 10.26 10.83 11.40 14.25 17.10 28.50 28.50 34.50 34.50 34.50 34.50 34.50 34.50 34.50 34.50 35.70 36.27 37.27 3	58 ct. 1.16 1.74 2.32 2.90 3.48 4.06 4.64 5.22 5.80 6.38 6.38 6.7.54 8.12 9.28 9.28 9.44 11.02 11.40 17.40 23.20 29.00 34.80 40.64 40.66 40.66 40.66	59 ct. 1.18 1.77 2.36 2.95 3.54 4.72 5.31 4.72 5.31 7.67 8.26 7.67 8.26 9.44 10.03 10.62 11.21 11.80 29.50 35.40 4.72 35.90 6.49 7.67 8.26 9.44 10.03 10.62 11.21 11.80 29.50 20.64	60 ct. 1.20 1.80 2.40 3.00 3.60 4.20 4.80 6.40 6.00 6.60 7.20 7.80 8.40 9.60 10.20 11.40 11.40 12.40 30.00 36.00 36.00 42.00	61 et. 1.22 1.83 2.44 3.05 3.66 4.27 4.88 5.49 6.10 6.71 7.32 7.93 8.54 9.76 10.37 10.98 11.59 10.37 10.98 11.59 24.42 30.50 36.60 36.60 42.70 4	62 ct. 1.24 1.86 2.48 3.10 3.72 4.34 4.96 6.20 7.44 8.06 8.68 9.30 9.92 10.54 11.16 11.78 12.40 31.00 37.20 43.40
2 3 4 4 5 6 6 7 8 8 9 9 10 11 12 13 14 15 16 6 19 20 25 30 40 60 70 80	52 ct. 1.04 1.56 2.08 2.08 2.60 3.12 4.16 4.68 4.68 4.66 4.68 7.80 9.38 9.36 9.38 10.40 15.60 20.80 20	53 ct. 	54 ct	55 ct. 1.10 1.65 2.20 2.75 3.30 3.85 4.40 4.95 5.50 6.60 7.70 8.25 6.60 10.45 11.00 22.00 13.75 16.50 22.00 33.85 44.00 4.95 33.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 3	56 ct. 1.12 1.68 2.24 2.80 3.36 5.04 5.04 6.72 7.28 7.84 8.40 9.52 11.20 16.80 22.40 33.60 33.60 34.48 35.60	57 ct. 1.14 1.71 2.285 3.42 2.85 3.49 4.56 5.13 6.70 6.27 7.98 8.55 6.70 10.26 10.83 11.40 22.80 22.80 34.20 34.20 34.20	58 ct. 1.16 1.74 2.32 2.90 3.48 4.06 4.64 5.22 5.80 6.38 6.96 7.54 8.12 8.70 9.28 9.86 10.44 11.02 11.60 14.50 17.40 23.20 23.48 0.46.40 46.40	59 ct. 1.18 1.77 2.36 2.95 3.54 4.13 4.72 5.31 5.90 6.49 7.67 8.26 8.85 9.44 10.03 10.62 11.21 11.80 14.75 17.70 23.60 29.53 40.23 4	60 ct. 1.20 1.80 2.40 3.00 4.20 4.80 5.40 6.00 6.60 7.20 7.80 8.40 9.00 9.60 10.20 11.40 12.00 15.00 18.00 18.00 24.00 36.00 42.00 48.00	61 ct. 1.22 1.83 2.44 3.05 3.66 4.27 4.89 6.10 6.71 7.32 7.93 8.54 9.15 9.76 10.37 10.98 11.59 12.20 15.25 18.30 24.42 30.50 30.60 42.70 42.70 43.60 44.60 45.60 45.60 46.60 4	62 ct. 1.24 1.86 2.48 3.10 3.72 4.34 4.96 5.58 6.20 6.82 7.44 8.06 8.68 9.99 10.54 11.16 11.76 11.76 11.76 11.70 43.60 43.60
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30 40 60	52 ct. 1.04 1.56 2.08 3.12 4.16 4.68 5.20 6.24 6.76 6.72 6.24 6.78 9.36	53 ct. 	54 ct. 1.08 1.62 2.16 2.70 3.24 4.32 4.32 4.32 4.32 1.0.26 5.40 5.94 8.10 8.64 8.10 8.64 9.72 10.26 21.60 27.00 37.80 43.20 43.20	55 ct. 1.10 1.65 3.30 3.30 3.85 4.40 5.50 6.60 7.15 7.70 8.80 9.90 10.45 9.90 11.00 13.75 9.90 10.45 4.95	56 ct. 1.12 1.68 2.24 2.80 3.36 5.04 5.60 6.16 6.72 7.28 8.96 10.08 11.20 11.20 11.20 22.40 28.00 39.20 44.80 39.20 44.80 50.00	57 ct. 1.14 1.71 2.28 2.85 3.42 3.99 4.56 5.13 5.70 6.27 6.84 7.41 7.98 9.69 10.26 10.83 11.40 14.25 17.10 28.50 28.50 34.50 34.50 34.50 34.50 34.50 34.50 34.50 34.50 35.70 36.27 37.27 3	58 ct. 1.16 1.71 2.32 2.90 3.48 4.06 4.64 5.22 5.80 6.38 6.38 6.75 4.81 1.02 9.28 11.02 29.00 44.60 46.40 46.40 46.40	59 ct. 1.18 1.77 2.36 2.95 3.54 4.72 5.31 4.72 5.31 7.67 8.26 7.67 8.26 9.44 10.03 10.62 11.21 11.80 29.50 35.40 4.72 35.90 6.49 7.67 8.26 9.44 10.03 10.62 11.21 11.80 29.50 20.64	60 ct. 1.20 1.80 3.00 4.20 4.80 6.60 6.60 7.80 9.60 10.20 10.20 11.40 15.00 42.00 48.00 42.00 48.	61 et. 1.22 1.83 2.44 3.05 3.66 4.27 4.88 5.49 6.10 6.71 7.32 7.93 8.54 9.76 10.37 10.98 11.59 10.37 10.98 11.59 24.42 30.50 36.60 36.60 42.70 4	62 ct. 1.24 1.86 2.48 3.10 3.72 4.34 4.96 6.20 7.44 8.06 8.68 9.30 9.92 10.54 11.16 11.78 12.40 31.00 37.20 43.40

READY RECKONER.

If the Number required is not found in the Tables, add two Numbers together; for instance, if 35 bushels are required, add the prices opposite 30 and 5 together; and so for 365 bushels—treble the value of 100, and add 60 and 5 together.

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Nos	62½ct.	63 ct.	64ct.	65 ct.	66 ct.	66%ct.	67 ct.	68 ct.	69 ct.	70 ct.	71 ct.
2	1.25	1.26	1.28	1.30	1.32	1.331/3	1.34	1.36	1.38	1.40	1.42
2 3 4	1.871/2	1.89	1.92	1.95	1.98	2.00	2.01	2.04	2.07	2.10	2.13
4	2.50	2.52	2.56	2.60	2.64	$\frac{2.662}{3}$ $\frac{3.331}{3}$	2.68	2.72	2.76	2.80	2.84
- D	$\frac{3.121/_{2}}{3.75}$	3.15	3.20 3.84	3.25 3.90	3.30 3.96	4.00	3.35 4.02	3.40 4.08	3.45 4.14	3.50 4.20	3.55 4.26
7	4.371/2	4.41	4.48	4.55	4.62	4.662/	4.69	4.76	4.83	4.90	4.97
5 6 7 8	5.00	5.04	5.12	5.20	5.28	4.66 ² / ₃ 5.33 ¹ / ₃	5.36	5.44	5.52	5.60	5 68
9	5.621/2	5.67	5.76	5.85	5.94	6.00	6.03	6.12	6.21	6.30	6.39
10	6.25	6.30	6.40	6.50	6.60	6.662/ ₃ 7.331/ ₃	6.70	6.80	6.90	7.00	7.10
11	6.871/2	6.93	7.04	7.15	7.26	7.331/3	7.37	7.48	7.59	7.70	7.81
12 13	7.50 $8.12\frac{1}{2}$	7.56 8.19	7.68 8.32	7.80 8.45	7.92 8.58	8.00	8.04 8.71	8.16 8.84	8.28 8.97	8.40 9.10	8.52 9.23
14	8.75	8.80		9.10	9.24	8.66 ² / ₃ 9.33 ¹ / ₃	9.38	9.52	9. 66	9.80	9.94
15	9.371/2	9.45		9.75	9.90	10.00	10.05	10.20	10.35	10.50	10.65
16	10.00	10.08	10.24	10.40	10.56	10.662/3	10.72	10.88	11.04	11.20	11.36
17	$10.62\frac{1}{2}$		10.88	11.05	11.22	10.66 ² / ₃ 11.33 ¹ / ₃	11.39	11.56	11.73	11.90	12.07
18 19	11.25	11.34	11.52	11.70	11 88	112 00	12.06 12.73	12.24	12.42	12.60	12.78
20	$11.87\frac{1}{2}$ 12.50		12.16 12.80	12.35 13.00	12.54	12.662/ ₃ 13.331/ ₃	13.40	12.92 13.60	13.11 13.80	13.30 14.00	13.49 14.20
25	$15.62\frac{1}{2}$	15.75	16.00	16.25	16.50	16.662/3	16.75	17.00	17.25	17.50	17.78
25 30	18.75	18.90	19.20	19.50	19.80	20.00	20.10	20.40	20.70	21.00	17.75 21.30
40	25.00	25.20	25.60	26.00	26.40	26.66 ² / ₃ 33.33 ¹ / ₃	.26.80	27.20	27.60	28.00	28.40
50 60	31.25	31.50	32.00 38.40	32.50	33.00	$33.33\frac{1}{3}$	33.50	34,00	34.50	35.00	35.50
60	37.50	37.80	38.40	39.00	39.60	40.00	40.20	40.80	41.40	42.00	42.60
70 80	43.75 50.00		44.80 51.20	45.50 52.00	40.20 50.80	46.66 ² / ₃ 53.33 ¹ / ₃	46.90 53.00	47.60 54.40	48.30 55.20	49.00 56.00	49.70 56.80
90	51.25		57.60	58.50	59.40	60.00	60.30	61.20	62.10	63.00	63.90
				00.00							
100	62.50	63.00	64.00	65.00	66.00	66.661/2	67.00	68.00	69.00	70.00	71.00
-		i	A SHARE SE				PROPERTY OF THE PARTY OF THE PA			ACTE STORY OF STREET	angual (malifor)
Nos	72 et.	73 ct.	74 ct.	75 ct.	76 ct.	77 ct.	78 ct.	79 ct.	80 ct.	81 ct.	82 ct
Nos	72 ct.	73 ct.	74 ct. 1.48 2.22	75 et.	76 ct.	77 ct.	78 et.	79 ct.	80 ct.	81 ct.	
Nos	72 ct. 1.44 2.16 2.88	73 ct. 1.46 2.19 2.92	74 ct. 1.48 2.22 2.96	75 ct. 1.50 2.25 3.00	76 ct. 1.52 2.28 3.04	77 ct. 1.54 2.31 3.08	78 ct. 1.56 2.34 3.12	79 ct. 1.58 2.37 3.16	80 ct. 1.60 2.40 3.20	81 ct. 1.62 2.43 3.24	82 ct 1.64 2.46 3.28
Nos	72 ct. 1.44 2.16 2.88 3.60	73 ct. 1.46 2.19 2.92 3.65	74 ct. 1.48 2.22 2.96 3.70	75 ct. 1.50 2.25 3.00 3.75	76 ct. 1.52 2.28 3.04 3.80	77 ct. 1.54 2.31 3.08 3.85	78 ct. 1.56 2.34 3.12 3.90	79 ct. 1.58 2.37 3.16 3.95	80 ct. 1.60 2.40 3.20 4.00	81 ct. 1.62 2.43 3.24 4.05	82 ct 1.64 2.46 3.28 4.10
Nos	72 ct. 7 1.44 2.16 2.88 3.60 4.32	73 ct. 1.46 2.19 2.92 3.65 4.38	74 ct. 1.48 2.22 2.96 3.70 4.44	75 ct. 1.50 2.25 3.00 3.75 4.50	76 ct. 1.52 2.28 3.04 3.80 4.56	77 ct. 1.54 2.31 3.08 3.85 4.62	78 ct. 1.56 2.34 3.12 3.90 4.68	79 ct. 1.58 2.37 3.16 3.95 4.74	80 ct. 1.60 2.40 3.20 4.00 4.80	81 ct. 1.62 2.43 3.24 4.05 4.86	82 ct 1.64 2.46 3.28 4.10 4.92
Nos 2 3 4 5 6 7	72 ct. 1.44 2.16 2.88 3.60 4.32 5.04	73 ct. 1.46 2.19 2.92 3.65 4.38 5.11	74 ct. 1.48 2.22 2.96 3.70 4.44 5.18	75 ct. 1.50 2.25 3.00 3.75 4.50 5.25	76 ct. 1.52 2.28 3.04 3.80 4.56 5.32	77 ct. 1.54 2.31 3.08 3.85 4.62 5.39	78 ct. 1.56 2.34 3.12 3.90 4.68 5.46	79 ct. 1.58 2.37 3.16 3.95 4.74 5.53	80 ct. 1.60 2.40 3.20 4.00 4.80 5.60	81 ct. 1.62 2.43 3.24 4.05 4.86 5.67	82 ct 1.64 2.46 3.28 4.10 4.92 5.74
Nos 2 3 4 5 6 7 8 9	72 ct. 7 1.44 2.16 2.88 3.60 4.32	73 ct. 1.46 2.19 2.92 3.65 4.38 5.11 5.84	74 ct. 1.48 2.22 2.96 3.70 4.44 5.18 5.92	75 et. 1.50 2.25 3.00 3.75 4.50 5.25 6.00	76 ct. 1.52 2.28 3.04 3.80 4.56 5.32 6.08	77 ct. 1.54 2.31 3.08 3.85 4.62 5.39 6.16	78 ct. 1.56 2.34 3.12 3.90 4.68	79 ct. 1.58 2.37 3.16 3.95 4.74	80 ct. 1.60 2.40 3.20 4.00 4.80 5.60	81 ct. 1.62 2.43 3.24 4.05 4.86 5.67 6.48 7.29	82 ct 1.64 2.46 3.28 4.10 4.92 5.74 6.56 7.38
Nos 2 3 4 5 6 7 8 9 10	72 ct. 7 1.44 2.16 2.88 3.60 4.32 5.04 5.76 6.48 7.20	73 ct. 1.46 2.19 2.92 3.65 4.38 5.11 5.84 6.57 7,30	74 ct. 1.48 2.22 2.96 3.70 4.44 5.18 5.92 6.66 7.40	75 et. 1.50 2.25 3.00 3.75 4.50 5.25 6.00 6.75 7.50	76 ct. 1.52 2.28 3.04 3.80 4.56 5.32 6.08 6.84 7.60	77 ct. 1.54 2.31 3.08 3.85 4.62 5.39 6.16 6.93 7.70	78 ct. 1.56 2.34 3.12 3.90 4.68 5.46 6.24 7.02 7.80	79 ct. 1.58 2.37 3.16 3.95 4.74 5.53 6.32 7.11 7.90	80 ct. 1.60 2.40 3.20 4.00 4.80 5.60 6.40 7.20 8.00	81 ct. 1.62 2.43 3.24 4.05 4.86 5.67 6.48 7.29 8.10	82 ct 1.64 2.46 3.28 4.10 4.92 5.74 6.56 7.38 8.20
Nos 2 3 4 5 6 7 8 9 10 11	72 ct. 7 1.44 2.16 2.88 3.60 4.32 5.04 5.76 6.48 7.20 7.92	73 ct. 1.46 2.19 2.92 3.65 4.38 5.11 5.84 6.57 7.30 8.03	74 ct. 1.48 2.22 2.96 3.70 4.44 5.18 5.92 6.66 7.40 8.14	75 ct. 1.50 2.25 3.00 3.75 4.50 5.25 6.00 6.75 7.50 8.25	76 ct. 1.52 2.28 3.04 3.80 4.56 5.32 6.08 6.84 7.60 8.30	77 ct. 1.54 2.31 3.08 3.85 4.62 5.39 6.16 6.93 7.70 8,47	78 ct. 1.56 2.34 3.12 3.90 4.68 5.46 6.24 7.02 7.80 8.58	79 ct. 1.58 2.37 3.16 3.95 4.74 5.53 6.32 7.11 7.90 8.69	80 ct. 1.60 2.40 3.20 4.00 5.60 6.40 7.20 8.00 8.80	81 ct. 1.62 2.43 3.24 4.05 4.86 5.67 6.48 7.29 8.10 8.91	82 ct 1.64 2.46 3.28 4.10 4.92 5.74 6.56 7.38 8.20 9.02
Nos 2 3 4 5 6 7 8 9 10 11 12	72 ct. 1.44 2.16 2.88 3.60 4.32 5.04 5.76 6.48 7.20 7.92 8.64	73 ct. 1.46 2.19 2.92 3.65 4.38 5.11 5.84 6.57 7.30 8.03 8.76	74 ct. 1.48 2.22 2.96 3.70 4.44 5.18 5.92 6.66 7.40 8.14 8.88	75 et. 1.50 2.25 3.00 3.75 4.50 5.25 6.00 6.75 7.50 8.25 9.00	76 ct. 1.52 2.28 3.04 3.80 4.56 5.32 6.84 7.60 8.30 9.12	77 ct. 1.54 2.31 3.08 3.85 4.62 5.39 6.16 6.93 7.70 8.47 9.24	78 ct. 1.56 2.34 3.12 3.90 4.68 5.46 6.24 7.02 7.80 8.58 9.36	79 ct. 1.58 2.37 3.16 3.95 4.74 5.53 6.32 7.11 7.90 8.69 9.48	80 ct. 1.60 2.40 3.20 4.00 4.80 5.60 6.40 7.20 8.00 8.80 9.60	81 ct. 1.62 2.43 3.24 4.05 4.86 5.67 6.48 7.29 8.10 8.91 9.72	82 ct 1.64 2.46 3.28 4.10 4.92 5.74 6.56 7.38 8.20 9.02 9.84
Nos 2 3 4 5 6 7 8 9 10 11 12 13	72 ct. 1.44 2.16 2.88 3.60 4.32 5.76 6.48 7.20 7.92 8.64 9.36	73 ct. 1.46 2.19 2.92 3.65 4.38 5.11 5.84 6.57 7.30 8.03 8.76 9.49	74 ct. 1.48 2.22 2.96 3.70 4.44 5.18 5.92 6.66 7.40 8.14 8.88 9.62	75 et. 1.50 2.25 3.00 3.75 4.50 5.25 6.00 6.75 7.50 8.25 9.00 9.75	76 ct. 1.52 2.28 3.04 3.80 4.56 5.32 6.08 6.08 7.60 8.30 9.12 9.88	77 ct. 1.54 2.31 3.08 3.85 4.62 5.39 6.16 6.93 7.70 8.47 9.24 10.01	78 ct. 1.56 2.34 3.12 3.90 4.68 5.46 6.24 7.02 7.80 8.58 9.36 10.14	79 ct. 1.58 2.37 3.16 3.95 4.74 5.53 6.32 7.11 7.90 8.69 9.48 10.27	80 ct. 1.60 2.40 3.20 4.00 4.80 5.60 6.40 7.20 8.00 8.80 9.60 10.40	81 ct. 1.62 2.43 3.24 4.05 4.86 5.67 6.48 7.29 8.10 9.72 10.53	82 ct 1.64 2.46 3.28 4.10 4.92 5.74 6.56 7.38 8.20 9.02 9.84 10.66
Nos 2 3 4 5 6 7 8 9 10 11 12 13 14 15	72 ct. 1.44 2.16 2.88 3.60 4.32 5.04 5.76 6.48 7.20 7.92 8.64 9.36 10.08	73 ct. 1.46 2.19 2.92 3.65 4.38 5.84 6.57 7.30 8.03 8.76 9.49 10.22	74 ct. 1.48 2.22 2.96 3.70 4.44 5.18 5.92 6.66 7.40 8.14 8.88 9.62 10.36	75 ct. 1.50 2.25 3.00 3.75 4.50 5.25 6.00 6.75 7.50 8.25 9.00 9.75 10.50	76 ct. 1.52 2.28 3.04 3.80 4.56 5.32 6.08 7.60 8.30 9.12 9.88 10.64	77 ct. 1.54 2.31 3.08 3.85 4.62 5.39 6.16 6.93 7.70 8.47 9.24 10.01 10.78	78 ct. 1.56 2.34 3.12 3.90 4.68 5.46 6.24 7.02 7.80 8.58 9.36 10.14 10.92	79 ct. 1.58 2.37 3.16 3.95 4.74 5.53 6.32 7.11 7.90 8.69 9.48 10.27 11.06	80 ct. 1.60 2.40 3.20 4.00 4.80 5.60 6.40 7.20 8.00 8.80 9.60 10.40 11.20	81 ct. 1.62 2.43 3.24 4.05 4.86 5.67 6.48 7.29 8.10 8.91 9.72 10.53 11.34 12.15	82 ct 1.64 2.46 3.28 4.10 4.92 5.74 6.56 7.38 8.20 9.02 9.84
Nos 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	72 et. 1.44 2.16 2.88 3.60 4.32 5.04 5.76 6.48 7.90 7.92 8.64 9.36 10.08 10.80 11.52	73 ct. 1.46 2.19 2.92 3.65 4.38 5.11 5.84 6.57 7.30 8.03 8.76 9.49 10.22 10.95 11.68	74 ct. 1.48 2.22 2.96 3.70 4.44 5.18 5.92 6.66 7.40 8.14 8.88 9.62 10.36 11.10 11.84	75 ct. 1.50 2.25 3.00 3.75 4.50 5.25 6.00 6.75 7.50 8.25 9.00 9.75 10.50 11.25 12.00	76 ct. 1.52 2.28 3.04 3.80 4.56 5.32 6.88 7.60 8.30 9.12 9.88 10.64 11.40 12.16	77 ct. 1.54 2.31 3.08 3.85 4.62 5.39 6.16 6.93 7.70 8,47 9.24 10.01 10.78 11.55 12.32	78 ct. 1.56 2.34 3.12 3.90 4.68 5.46 6.24 7.02 7.80 8.58 9.36 10.14 10.92 11.70 12.48	79 ct. 1.58 2.37 3.16 3.95 4.74 5.53 6.32 7.11 7.90 8.69 9.48 10.27 11.06 11.85 12.64	80 ct. 1.60 2.40 3.20 4.00 6.60 6.40 7.20 8.00 8.80 9.60 10.40 11.20 12.00 12.80	81 ct. 1.62 2.43 3.24 4.05 4.86 5.67 6.48 7.29 8.10 8.91 9.72 10.53 11.34 12.15 12:96	82 ct 1.64 2.46 3.28 4.10 4.92 5.74 6.56 7.38 8.20 9.02 9.84 10.66 11.48 12.30 13.12
Nos 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	72 ct. 1.44 2.16 2.88 3.60 4.32 5.04 5.76 6.48 7.20 7.92 8.64 9.36 10.08 10.80 11.52 12.24	73 ct. 1.46 2.19 2.92 3.65 4.38 5.11 5.84 6.57 7.30 8.76 9.49 10.22 10.95 11.68 12.41	74 ct. 1.48 2.22 2.96 3.70 4.44 5.18 5.92 6.66 7.40 8.14 8.88 9.62 10.36 11.18 11.84 12.58	75 et. 1.50 2.25 3.00 3.75 4.50 5.25 6.00 6.75 7.50 8.25 9.00 9.75 10.50 11.25 12.00 12.75	76 ct. 1.52 2.28 3.04 3.80 4.56 5.32 6.08 6.84 7.60 8.30 9.12 9.88 10.64 11.40 12.16 12.92	77 ct. 1.54 2.31 3.08 3.85 4.62 5.39 6.16 6.93 7.70 8.47 9.24 10.78 11.55 12.32 13.09	78 ct. 1.56 2.34 3.12 3.90 4.68 5.46 6.24 7.02 7.80 8.58 9.36 10.14 10.92 11.70 12.48 13.26	79 ct. 1.58 2.37 3.16 3.95 4.74 5.53 6.32 7.11 7.90 8.69 9.48 10.27 11.06 11.85 12.64 13.43	80 ct. 1.60 2.40 3.20 4.00 4.80 5.60 7.20 8.00 8.00 10.40 11.20 12.00 12.80 13.60	81 ct. 1.62 2.43 3.24 4.05 4.86 5.67 6.48 7.29 8.10 8.91 9.72 10.53 11.34 12.15 12.96 13.77	82 ct 1.64 2.46 3.28 4.10 4.92 5.74 6.56 7.38 8.20 9.02 9.84 10.66 11.48 12.30 13.12 13.94
Nos 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	72 ct. 1.44 2.16 2.88 3.60 4.32 5.04 5.76 6.48 7.20 7.92 8.64 9.36 10.08 10.80 11.52 12.24 12.96	73 ct. 1.46 2.19 2.92 3.65 4.38 5.11 5.84 6.57 7.30 8.03 8.76 9.49 10.22 10.95 11.68 12.41 13.14	74 ct. 1.48 2.22 2.96 3.70 4.44 5.18 5.92 6.66 7.40 8.14 8.88 9.62 10.36 11.84 11.84 12.58 13.32	75 ct. 1.50 2.25 3.00 3.75 4.50 5.25 6.00 6.75 7.50 8.25 9.00 9.75 10.50 11.25 12.00 12.76 13.50	76 ct. 1.52 2.28 3.04 3.80 4.56 5.32 6.08 6.84 7.60 8.30 9.12 9.88 10.64 11.40 12.16 12.92 13.68	77 ct. 1.54 2.31 3.08 3.85 4.62 5.39 6.16 6.93 7.70 8,47 9.24 10.01 10.78 11.55 12.32 13.09	78 ct. 1.56 2.34 3.12 3.90 4.68 5.46 6.24 7.02 7.80 8.58 9.36 10.14 10.92 11.70 12.48 13.26 14.04	79 ct. 1.58 2.37 3.16 3.95 4.74 5.53 6.32 7.11 7.90 8.69 9.48 10.27 11.06 11.85 12.64 13.43 14.22	80 ct. 1.60 2.40 3.20 4.00 6.60 6.40 7.20 8.00 8.80 9.60 10.40 11.20 12.80 13.60 14.40	81 ct. 1.62 2.43 3.24 4.05 4.86 5.67 6.48 7.29 8.10 8.91 9.72 10.53 11.34 12.15 12.96 13.77 14.58	82 ct 1.64 2.46 3.28 4.10 4.92 5.74 6.56 7.38 8.20 9.02 9.84 10.66 11.48 12.30 13.12 13.94 14.76
Nos 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	72 ct. 1.44 2.16 2.88 3.60 4.32 5.04 5.76 6.48 7.20 7.92 8.64 9.36 10.80 11.52 12.24 12.96 13.68	73 ct. 1.46 2.19 2.92 3.65 4.38 5.11 5.84 6.57 7.30 8.03 8.76 9.49 10.22 10.95 11.68 12.41 13.14 13.87	74 ct. 1.48 2.22 2.96 3.70 4.44 5.18 5.92 6.66 7.40 8.14 8.88 9.62 10.36 11.10 11.84 12.58 13.32 14.06	75 ct. 1.50 2.25 3.00 3.75 4.50 6.75 7.50 9.00 9.75 10.50 12.00 12.75 13.50 14.25	76 ct. 1.52 2.28 3.04 3.80 4.56 5.32 6.08 7.60 8.30 9.12 9.88 10.64 11.40 12.16 12.92 13.68 14.44	77 ct. 1.54 2.31 3.08 3.85 4.62 5.39 6.16 6.93 7.70 8.47 9.24 10.01 10.78 11.55 12.32 13.09 13.86 14.63	78 ct. 1.56 2.34 3.12 3.90 4.68 5.46 6.24 7.02 7.80 8.58 9.36 10.14 10.92 11.70 12.48 13.26 14.04 14.82	79 ct. 1.58 2.37 3.16 3.95 4.74 5.53 6.32 7.11 7.90 9.48 10.27 11.06 11.85 12.64 13.43 14.22 15.01	80 ct. 1.60 2.40 3.20 4.00 4.80 6.40 7.20 8.00 9.60 10.40 11.20 12.80 13.60 14.40 15.20	81 ct. 1.62 2.43 3.24 4.05 4.86 5.67 6.48 7.29 8.10 9.72 10.53 11.34 12.15 12.96 13.77 14.58 15.99	82 ct 1.64 2.46 3.28 4.10 4.92 5.74 6.56 7.38 8.20 9.02 9.84 10.66 11.48 12.30 13.12 13.94 14.76 15.58
Nos 2 3 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19 20 55	72 ct. 1.44 2.16 2.88 3.60 4.32 5.04 5.76 6.48 7.20 8.64 9.36 10.08 10.08 11.52 12.24 12.96 13.68 14.40	73 ct. 1.46 2.19 2.92 3.65 4.38 5.11 5.84 6.57 7.30 8.76 9.49 10.25 11.68 12.41 13.14 13.14 13.87 14.60	74 ct. 1.48 2.22 2.96 3.70 4.44 5.18 5.92 6.66 7.40 8.14 8.88 9.62 10.36 11.10 11.84 12.58 13.32 14.06 14.80	75 ct. 1.50 2.28 3.00 3.75 4.50 5.25 6.00 6.75 9.00 9.75 10.50 11.25 12.00 12.78 13.50 14.25 15.00	76 ct. 1.52 2.28 3.04 3.80 4.56 5.32 6.08 6.84 7.60 8.30 9.12 9.88 10.64 11.40 12.16 12.92 13.68 14.44 15.29	77 ct. 1.54 2.31 3.08 3.85 4.62 5.39 6.16 6.93 7.70 9.24 10.01 10.78 11.55 12.32 13.09 13.86 14.63 15.40	78 ct. 1.56 2.34 3.12 3.90 4.68 5.46 6.24 7.02 7.80 8.58 9.36 10.14 10.92 11.70 12.48 13.26 14.04 14.82 15.60	79 ct. 1.58 2.37 3.16 3.95 4.74 5.53 6.32 7.11 7.90 8.69 9.48 10.27 11.06 11.85 12.64 13.43 14.22 15.01 15.80	80 ct. 1.60 2.40 3.20 4.00 6.40 7.20 8.00 8.80 9.60 10.40 11.20 12.80 13.60 14.40 15.20 16.00	81 ct. 1.62 2.43 3.24 4.05 4.86 5.67 6.48 7.29 8.10 8.91 9.72 10.53 11.34 12.15 12.96 13.77 14.58 15.39 16.20	82 ct 1.64 2.46 3.28 4.10 4.92 5.74 6.56 7.38 8.20 9.02 9.84 10.66 11.48 12.30 13.12 13.94 14.76 15.58 16.58
Nos 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30	72 ct. 1.44 2.16 2.88 3.60 4.32 5.76 6.48 7.20 7.92 8.64 9.36 10.08 10.08 11.52 12.24 12.24 12.26 13.68 14.40 18.00 21.60	73 ct. 1.46 2.19 2.92 3.65 4.38 5.11 5.87 7.30 8.03 8.76 9.49 10.22 10.95 11.68 12.41 13.14 13.87 14.60 18.25	74 ct. 1.48 2.22 2.96 3.70 4.44 5.18 5.92 6.66 7.40 8.14 8.88 9.62 10.36 11.10 11.84 12.58 13.32 14.06 14.80 18.50 22.20 22.20	75 ct. 1.50 2.25 3.00 3.75 4.50 5.25 6.00 6.75 7.50 8.25 9.00 9.75 10.50 11.25 12.00 14.25 13.50 14.25 15.00 18.75	76 ct. 1.52 2.28 3.04 3.80 4.56 5.32 6.08 7.60 8.30 9.12 9.88 10.64 11.40 12.16 12.92 13.68 14.44 15.20 19.00	77 ct. 1.54 2.31 3.08 3.85 4.62 5.39 6.16 6.93 7.70 9.24 10.78 11.55 12.32 13.09 13.86 14.63 15.40 19.25 23.10	78 ct. 1.56 2.34 3.12 3.90 4.68 5.46 6.24 7.02 7.80 8.58 9.36 10.14 10.92 11.70 12.48 13.26 14.04 14.82 15.60 19.50 23.40	79 ct. 1.58 2.37 3.16 3.95 4.74 5.53 6.395 7.11 7.90 8.69 9.48 10.27 11.06 11.85 12.64 13.43 14.22 15.01 15.80 19.75 23.70	80 ct. 1.60 2.40 3.20 4.80 5.60 6.40 7.20 8.00 10.40 11.20 12.80 13.60 14.40 15.20 16.00 20.00 24.00	81 ct. 1.62 2.43 3.24 4.05 4.86 5.67 6.48 7.29 8.10 8.91 9.72 10.53 11.34 12.15 12.96 13.77 14.58 15.39 16.20 20.25 24.30	82 ct 1.64 2.46 3.28 4.10 4.92 5.74 6.56 7.38 8.20 9.02 9.02 9.84 10.66 11.48 12.30 13.12 13.94 14.76 15.58 16.40 20.50 20.6
Nos 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 55 50 40	72 ct. 1.44 2.16 2.88 3.60 4.32 5.04 5.76 6.48 7.20 7.92 8.64 9.36 10.80 11.52 12.24 12.96 13.68 14.40 18.00 21.60 28.80	73 ct. 1.46 2.19 2.92 3.65 5.11 5.84 6.57 7.30 8.03 8.76 9.49 10.22 10.95 11.68 12.41 13.14 13.87 14.60 18.25 21.90 29.20	74 ct. 1.48 2.22 2.96 3.70 4.44 8.88 6.62 6.66 7.40 11.84 12.58 14.06 14.80 18.50 22.20 29.60	75 ct. 1.50 2.25 3.00 3.75 4.50 5.25 6.00 6.75 7.50 10.50 11.25 12.00 12.75 13.50 14.25 15.00 18.75 22.50 30.00	76 ct. 1.52 2.28 3.04 4.56 5.32 6.08 6.84 7.60 8.30 9.12 9.18 9.18 10.64 11.40 12.16 12.92 13.68 14.44 15.20 19.00 22.80	77 ct. 1.54 2.31 3.08 3.85 4.62 5.39 6.16 6.96 6.19 10.70 8.47 10.01 10.78 11.55 12.32 13.09 13.86 14.63 15.40 19.25 23.10 30.80	78 ct. 1.56 2.34 3.12 3.90 4.68 5.46 6.24 7.02 7.80 9.36 10.14 10.92 11.70 12.48 13.26 14.04 14.82 15.60 19.50 23.40 31.20	79 ct. 1.58 2.37 3.16 3.95 4.74 5.53 6.32 7.11 7.90 9.48 10.27 11.06 11.85 12.64 13.43 14.22 15.01 15.80 19.75 23.70 31.60	80 ct. 1.60 2.40 3.20 4.00 4.80 5.60 6.40 7.20 8.00 9.60 10.40 11.20 12.80 14.40 15.20 16.00 20.00 24.00 32.0	81 ct. 1.62 2.43 3.24 4.05 4.86 5.67 6.48 7.29 8.10 9.72 10.53 11.34 12.15 12.96 13.77 14.58 15.39 16.20 20.25 24.30 32.40	82 ct 1.64 2.46 3.28 4.10 4.92 5.74 6.56 7.38 8.20 9.02 9.84 10.68 11.48 12.30 13.12 13.94 14.76 15.58 16.40 20.50 24.60 24.
Nos 2 3 4 5 5 6 6 7 7 8 9 9 10 11 12 13 14 15 16 16 17 18 19 20 25 50 50 50	72 ct. 1.44 2.16 2.88 3.60 4.32 5.04 5.76 6.48 7.20 7.92 8.64 9.36 10.08 10.08 11.52 12.24 12.94 12.96 13.68 14.40 21.60 22.80 36.00	73 ct. 1.46 2.19 2.92 3.65 4.38 5.11 5.84 6.57 7.30 8.76 9.49 10.95 11.68 12.41 13.14 13.14 13.87 14.60 29.20 36.50	74 ct. 1.48 2.22 2.96 3.70 4.44 5.18 5.92 6.66 6.68 11.10 11.10 11.10 11.258 13.32 14.06 14.80 14.80 13.32 14.00 14.80 14.80 14.80 15.80 16	75 ct. 1.50 2.28 3.00 3.75 4.50 5.25 6.00 6.75 7.50 8.25 9.00 9.75 10.50 11.25 12.70 12.75 13.50 14.25 15.00 18.75 22.50 30.00 37.75 37.75	76 ct. 1.52 2.28 3.04 3.80 4.56 5.32 6.08 6.84 7.60 8.30 9.12 9.88 10.64 11.40 12.16 12.92 13.68 14.44 15.20 19.00 22.80 30.40 38.00	77 ct. 1.54 2.31 3.08 3.85 4.62 5.39 6.16 6.93 8.47 9.24 10.78 11.55 12.32 13.09 13.86 14.63 15.40 19.25 23.10 30.80 38.50	78 ct. 1.56 2.34 3.12 3.90 4.68 5.46 6.24 7.02 7.80 8.58 9.36 10.14 16.92 11.70 12.48 13.26 14.04 14.82 15.60 19.50 23.40 31.20 39.00	79 ct. 1.58 2.37 3.16 3.95 4.74 5.53 6.32 7.11 7.90 8.69 9.48 10.27 11.06 11.85 12.64 13.43 14.22 15.01 15.80 19.75 23.70 31.60 39.50	80 ct. 1.60 2.40 3.20 4.00 4.80 6.40 7.20 8.80 9.60 10.40 11.20 12.80 13.60 14.40 15.20 16.00 20.00 24.00 32.00 40.00	81 ct. 1.62 2.43 3.24 4.05 4.86 5.67 6.48 7.29 8.10 8.91 9.72 10.53 11.34 12.15 12.96 13.77 14.58 15.39 16.20 20.25 24.30 32.40 40.50	82 ct 1.64 2.46 3.28 4.10 4.92 5.74 6.56 7.38 8.20 9.02 9.84 10.66 11.48 12.30 13.12 13.94 14.76 15.58 16.40 20.50 24.60 32.80 44.00 44.
Nos 2 3 4 5 6 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30 40 50 60	72 ct. 1.44 2.16 2.88 3.60 4.32 5.04 5.76 6.48 7.20 7.92 8.64 9.36 10.80 11.52 12.24 12.96 13.68 14.40 18.00 21.60 28.80 36.00	73 ct. 1.46 2.19 2.92 3.65 4.38 5.11 5.84 6.57 7.30 8.76 9.49 10.22 10.95 11.68 12.41 13.14 60 18 25 29.20 36 50 43.80	74 ct. 1.48 2.22 2.96 3.70 4.44 5.18 5.92 6.66 7.40 8.14 10.36 11.10 11.13 12.58 9.62 14.80 14.80 12.90 29.60 37.00 37.00 44.44 44.44 44.44	75 et. 1.50 2.25 3.00 3.75 4.50 5.25 6.00 6.75 7.50 8.25 9.00 9.75 10.50 11.25 12.00 12.75 13.50 14.25 15.00 18.75 22.50 30.00 37.50 45.00	76 ct. 1.52 2.28 3.04 3.80 4.56 5.32 6.08 6.84 7.60 9.12 9.88 10.64 11.40 12.16 12.92 13.68 14.44 15.20 19.00 22.80 30.40 38:00	77 ct. 1.54 2.31 3.08 3.85 4.62 5.39 6.16 6.93 7.70 8.47 10.01 10.78 11.55 12.32 13.09 13.86 14.63 15.40 19.25 23.10 23.10 23.10 24.620 38.50	78 ct. 1.56 2.34 3.12 3.90 4.68 5.46 6.24 7.02 7.80 8.58 9.36 10.14 10.92 11.70 12.48 13.26 14.04 14.82 15.60 19.50 23.40 31.20 39.00	79 ct. 1.58 2.37 3.16 3.95 4.74 5.53 6.32 7.11 7.90 9.48 10.27 11.06 11.85 12.64 13.43 14.22 15.01 15.80 19.75 23.70 31.60 39.50 47.40	80 ct. 1.60 2.40 3.20 4.80 5.60 6.40 7.20 8.80 9.60 10.40 11.20 12.80 13.60 14.40 15.20 20.00 24.00 32.00 48.00 32.00 48.00	81 ct. 1.62 2.43 3.24 4.05 4.86 5.67 6.48 7.29 8.10 10.53 11.34 12.15 12.96 13.77 14.58 15.39 16.20 20.25 24.86 24.86 20.25 24.86 24.86 24.86 20.25 24.86 24.86 24.86 24.86 25.87 26.	82 ct 1.64 2.46 3.28 4.10 4.92 5.74 6.56 7.38 8.20 9.02 9.84 10.66 11.48 12.30 13.12 13.94 14.76 15.58 16 40 20.50 24.60 32.80 41.00
Nos 2 3 4 4 5 6 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30 60 60 70 70	72 ct. 1.44 2.16 2.88 3.60 4.32 5.04 5.76 6.48 7.20 7.92 8.64 9.36 10.08 10.80 11.52 12.24 12.96 13.68 14.40 21.60 22.80 36.00 43.20 50.40 50.40	73 ct. 1.466 2.199 2.992 3.655 4.388 5.111 5.84 6.57 7.30 8.76 8.03 8.76 11.68 11.46 11.3.47 13.14 13.14 13.14 14.60 18.25 21.90 36.50 43.80 4	74 ct. 1.48 2.22 2.96 3.70 4.44 5.18 5.92 10.36 11.84 12.58 13.32 14.06 14.80 14.80 14.80 14.40 44.40 44.40 45.18	75 et. 1.50 2.28 3.00 3.75 4.50 6.75 6.00 6.75 8.25 9.00 9.75 10.50 11.25 13.50 14.25 15.00 9.75 13.50 14.25 15.00 15.25 15.00 15.25 15.00 15.25 15.00 15.25 15.00 15.25 15.00 15.25 15.00 15.25 15.00 15.25 15.00 15.25 15.00 15.05	76 ct. 1.52 2.28 3.04 3.80 4.56 6.84 7.60 8.30 9.12 9.88 10.64 11.40 12.16 12.92 13.68 14.44 15.20 22.80 30.40 38.00 45.60	77 ct. 1.54 2.31 3.08 3.85 4.62 5.39 6.16 6.93 7.70 9.24 10.01 10.78 11.55 12.32 13.09 13.86 14.63 15.40 19.25 23.10 30.80 38.50 46.20	78 ct. 1.56 2.34 3.90 4.68 6.24 7.02 7.80 8.58 9.36 10.14 10.92 11.70 12.48 13.26 14.04 14.82 15.60 23.40 31.20 39.00 46.80	79 ct. 1.58 2.37 3.16 3.95 4.74 5.53 6.32 7.11 7.90 8.69 9.48 10.27 11.06 11.85 12.64 13.43 14.22 15.01 15.80 19.75 23.70 31.60 39.50 47.40	80 ct. 1.60 2.40 3.20 4.00 4.80 5.60 6.40 7.20 8.80 9.60 10.40 11.20 12.00 12.80 13.60 14.40 15.20 16.00 24.00 24.00 24.00 24.00 48.00 48.00 48.00 49.00 40.0	81 ct. 1.62 2.43 3.24 4.05 4.86 5.67 6.48 7.29 8.10 8.91 9.72 10.53 11.34 12.15 12.96 13.77 14.58 15.39 16.20 20.25 24.30 32.40 40.60	82 ct 1.64 2.46 3.28 4.10 4.92 5.74 6.56 7.38 8.20 9.02 9.02 9.84 10.66 11.48 12.30 13.12 13.94 14.76 15.58 16.40 20.50 24.60 32.80 41.00 49.22 57.40 57.4
Nos 2 3 4 5 6 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30 40 50 60	72 ct. 1.44 2.16 2.88 3.60 4.32 5.04 5.76 6.48 7.20 7.92 8.64 9.36 10.80 11.52 12.24 12.96 13.68 14.40 18.00 21.60 28.80 36.00	73 ct. 1.46 2.19 2.92 3.65 4.38 5.11 5.84 6.57 7.30 8.76 9.49 10.22 10.95 11.68 12.41 13.14 60 18 25 29.20 36 50 43.80	74 ct. 1.48 2.22 2.96 3.70 4.44 5.18 5.92 6.66 7.40 8.14 10.36 11.10 11.13 12.58 9.62 14.80 14.80 12.90 29.60 37.00 37.00 44.44 44.44 44.44	75 ct 1.50 2.25 3.00 3.75 4.50 6.00 6.75 5.25 6.00 6.75 10.50 11.25 11.25 12.00 12.75 12.00 14.25 30.00 52.50 45.00 6.00 6.00 6.00 6.00 6.00 6.00 6.00	76 ct. 1.52 2.28 3.04 4.56 6.8 4.56 6.8 6.8 10.64 11.40 11.40 11.40 12.92 80 30.40 45.60 653.20 653.20 653.20 655.20 66.80 66.80 66.80	77 ct. 1.54 2.31 3.08 3.85 4.62 5.39 6.16 6.93 7.70 8.47 10.01 10.78 11.55 12.32 13.09 13.86 14.63 15.40 19.25 23.10 23.10 23.10 24.620 38.50	78 ct. 1.56 2.34 3.12 3.90 4.68 5.46 6.24 7.02 7.80 8.58 9.36 10.14 10.92 11.70 12.48 13.26 14.04 14.82 15.60 19.50 23.40 31.20 39.00	79 ct. 1.58 2.37 3.16 3.95 4.74 7.74 7.90 8.69 9.48 10.27 11.85 12.64 13.43 14.22 15.01 19.76 23.70 39.50 63.20 63.20 63.20 63.20	80 ct. 1.60 2.40 3.20 4.00 4.80 5.60 6.40 7.20 8.00 9.60 10.40 11.20 12.80 13.60 14.40 15.20 16.00 24.00 32.00 40.00 48.00 56.00 66.00 64.00 72.00	81 ct. 1.62 2.43 3.24 4.05 4.86 5.67 6.48 8.10 8.91 10.53 11.3.77 14.58 15.39 20.25 24.30 32.40 40.50 64.80 65.70 64.80 65.70 66.80 66.	82 ct 1.64 2.46 3.28 4.10 4.92 5.74 6.56 7.38 8.20 9.02 9.84 10.66 11.48 12.30 13.12 13.94 14.76 15.58 16 40 20.50 24.60 32.80 41.00

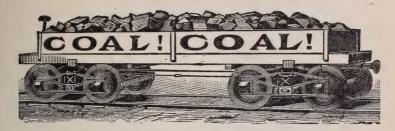
READY RECKONER.

If the Number required is not found in the Tables, add two Numbers together; for instance, if 35 bushels are required, add the prices opposite 20 and 5 together; and so for 365 bushels—treble the value of 100, and add 60 and 5 together.

Nos	83 ct.	84 ct.	85 ct.	86 ct.	87 ct.	87½ct.	88 ct.	89 cţ.	90 ct.	91 ct.	92 ct.
2	1.66	1.68	1.70	1.72	1.74		1.76		1.80	1.82	1.84
2 3 4 5 6 7 8	2.49	2.52	2.55	2.28	2.61	$2.62\frac{1}{2}$	2.64	2.67	2.70	2.73	2.76
4	3.32	3.36	3.40	3.44 4.30	3.48	3.50	3.52	3.56	3.60	3.64	3.68
0	4.15 4.98	4.20 5.04	4.25 5.10	5.16	4.35 5.22		4.40 5.28	4.45 5.34	4.50 5.40	4.55 5.46	4.60 5.52
7	5.81	5.88	5.95	6.02	6.09		6.16		6.30	6.37	6.44
8	6.64	6.72	6.80	6.88	6.96	7.00	7.04	7.12	7.20	7.28	7.36
9	7.47	7.56	7.65	7.74	7.83	7.871/2	7.92	8.01	8.10	8.19	8.28
10	8.30	8.40	8,50	8.60	8.70	8.75	8.80		9,00	9.10	9.20
11	9.13	9.24	9.35	9.46	9.57		9.68		9.90	10.01	10.12
12 13	9.96 10.79	10.08	10.20 11.05	10.32 11,18	10.44	10.50 11.37½	10.56	10.68 11.57	10.80 11.70	10.92 11.83	11.0 4 11.96
14	11.62	10.92 11.76	11.90	12.04	12.18	12.25	11.44 12.32	12.46	12.00	12.74	12.88
15	12.45	12.60	12.75	12.90	13.05	13.121/2	13.20	13.35	13.50	13.65	13.80
16	13.28	13.44	13.60	13.76	13.92	14.00	14.08		14.40	14.56	14.72
17	14.11	14,28	14,45	14.62		14.871/2		15.13	15.30	15.47	15.64
18	14.94	15.12	15.30	15.48	15.66	15.75	15.84	16.02	16.20	16.33	16.56
19 20	15.77	15.96	16.15 17.00	15.34 17.20	16.53	16.62½ 17.50	16.72 17.60	16.91 17.80	17.10	17.29	17.48 18.40
25	16.60 20.75	16.80 21.00	21.25	21.50	21.40	21.871/2	22.00	22.25	18.00 22.50	18.20 22.75	23.00
30	24,90	25.20	25.50	25.80	26.10	26.25	26.40		27.00	27.30	27.60
30 40	33.20	33.60	34,00	34.40	34.80	35.00	35.20		36.00	36.40	36.80
50	41.50	42.00	42.50	43.00		43.75	44,00	44.50	45.00	45.50	46.00
60 70	49.80	50.40	51.00	51.60		52.50	52.80	53.40	54.00	54.60	55.20
70	58.10	58.80	59.50	60.20		61.25	61.60		63.00	63.70	64.40
80 90	66.40 74.70	67.20 75.60	68.00 76.50	68.80 77.40		70.00 78.75	70.40		72.00 81.00	72.80 81.90	73.60 82.80
100	83.00	84.00	85.00	86.00		87.50	88.00				92.00
77.	00 -4	04 -4								1	
Nos	93 ct.	94 ct	95 0	et. 96	ct. 9	7 ct. 9	18 ct.	99 ct.	\$1.	\$2.	\$3.
2	1.86	1.88	5. 95 c	et. 96	ct. 9	7 ct. 9	8 ct.	99 ct.	\$1 .	\$2.	\$3. 6.
2	1.86 2.79	1.88	8 1.3 2 2.3	et. 96	ct. 9	7 ct. 5	1.96 2.94	99 et. 1.98 2.97	\$1. 2. 3.	\$2. 4. 6.	\$3. 6. 9.
2	1.86 2.79 3.72	1.88 2.89 3.70	8 1. 2 2. 6 3.	et. 96 90 1 85 2 80 3	ct. 9	7 ct. 9	1.96 2.94 3.92	99 ct. 1.98 2.97 3.66	\$1. 2. 3. 4.	\$2. 4. 6. 8.	\$3. 6. 9. 12.
2	1.86 2.79	1.88 2.82 3.70 4.70 5.64	8 1.3 2 2.6 6 3.0 4.5	et. 96 90 1 85 2 80 3 75 4 70 5	et. 9	7 ct. 5 1.94 2.91 3.88 4.85 5.82	1.96 2.94 3.92 4.90 5.88	99 ct. 1.98 2.97 3.66 4.95 5.94	\$1. 2. 3. 4. 5. 6.	\$2. 4. 6. 8. 10. 12.	\$3. 6. 9. 12. 15. 18.
2	1.86 2.79 3.72 4.65 5.58 6.51	1.88 2.85 3.70 4.70 5.66 6.50	8 1. 2 2 2. 6 3. 0 4. 4 5. 8 6.	et. 96 90 1 85 2 80 3 75 4 70 5 65 6	ct. 9 1.92 2.88 3.84 1.80 5.76 5.72	7 ct. 9 1.94 2.91 3.88 4.85 5.82 6.79	1.96 2.94 3.92 4.90 5.88 6.86	99 ct. 1.98 2.97 3.66 4.95 5.94 6.93	\$1. 2. 3. 4. 5. 6. 7.	\$2. 4. 6. 8. 10. 12. 14.	\$3. 6. 9. 12. 15. 18. 21.
2 3 4 5 6 7 8	1.86 2.79 3.72 4.65 5.58 6.51 7.44	1.88 2.89 3.70 4.70 5.66 6.50 7.59	5. 95 c 8 1. 2 2. 6 3. 0 4. 4 5. 8 6. 2 7.	et. 96 90 1 85 2 80 3 75 4 70 6 65 66	et. 9 1.92 2.88 3.84 4.80 5.76 5.72 7.68	7 ct. 9 1.94 2.91 3.88 4.85 5.82 6.79 7.76	1.96 2.94 3.92 4.90 5.88 6.86 7.84	99 ct. 1.98 2.97 3.66 4.95 5.94 6.93 7.92	\$1. 2. 3. 4. 5. 6. 7. 8.	\$2. 4. 6. 8. 10. 12. 14. 16.	\$3. 6. 9. 12. 15. 18. 21. 24.
2 3 4 5 6 7 8	1.86 2.79 3.72 4.65 5.58 6.51 7.44 8.37	1.88 2.83 3.70 4.70 5.6- 6.50 7.53 8.44	5. 95 c 8 1. 2 2. 6 3. 0 4. 4 5. 8 6. 2 7. 6 8.	et. 96 90 1 85 2 80 3 75 4 70 5 65 60 7 55 8	ct. 9 1.92 2.88 3.84 4.80 6.76 6.72 7.68 8.64	7 ct. 2 1.94 2.91 3.88 4.85 5.82 6.79 7.76 8.73	1.96 2.94 3.92 4.90 5.88 6.86 7.84 8.82	99 ct. 1.98 2.97 3.66 4.95 5.94 6.93 7.92 8.91	\$1. 2. 3. 4. 5. 6. 7. 8. 9.	\$2. 4. 6. 8. 10. 12. 14. 16. 18.	\$3. 6. 9. 12. 15. 18. 21. 24. 27.
2 3 4 5 6 7 8 9	1.86 2.79 3.72 4.65 5.58 6.51 7.44 8.37 9.30	1.88 2.89 3.70 4.70 5.64 6.50 7.59 8.44 9.40	5. 95 C 95 C 88 1.: 82 2.: 63 3.: 95 C 96 3.: 96 6.: 97 7.: 96 8.: 97 9.: 98 9.: 9	90 1 90 2 85 2 88 3 87 4 77 5 66 5 66 60 7 85 50 8	ct. 9 1.92 2.88 3.84 1.80 5.76 5.72 1.68 3.64 0.60	7 ct. 2 1.94 2.91 3.88 4.85 5.82 6.79 7.76 8.73 9.70	1.96 2.94 3.92 4.90 5.88 6.86 7.84 8.82 9.80	99 et. 1.98 2.97 3.66 4.95 5.94 6.93 7.92 8.91 9.90	\$1. 2. 3. 4. 5. 6. 7. 8. 9.	\$2. 4. 6. 8. 10. 12. 14. 16. 18. 20.	\$3. 6. 9. 12. 15. 18. 21. 24. 27. 20.
2 3 4 5 6 7 8 9 10	1.86 2.79 3.72 4.65 5.58 6.51 7.44 8.37 9.30 10.23	1.86 2.85 3.70 4.70 5.66 6.56 7.55 8.44 9.44 10.3	5. 95 c 88 1. 2. 2. 2. 3. 3. 4. 4. 5. 8. 6. 9. 9. 9. 4. 10.	et. 96 90 1 85 2 880 3 75 4 770 5 665 660 7 555 8 550 9 445 10	et. 9 1.92 2.88 3.84 4.80 5.76 5.72 1.68 8.64 0.60 0.56	7 ct. 2 1.94 2.91 3.88 4.85 5.82 6.79 7.76 8.73 9.70 10.67	1.96 2.94 3.92 4.90 5.88 6.86 7.84 8.82 9.80 10.78	99 ct. 1.98 2.97 3.66 4.95 5.94 6.93 7.92 8.91 9.90 10.89	\$1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11.	\$2. 4. 6. 8. 10. 12. 14. 16. 18.	\$3. 6. 9. 12. 15. 18. 21. 24. 27. 20. 33.
2 3 4 5 6 7 8 9 10 11 12 13	1.86 2.79 3.72 4.65 5.58 6.51 7.44 8.37 9.30 10.23 11.16 12.09	1.88 2.89 3.70 4.70 5.64 6.50 7.59 8.44 9.40	5. 95 c 8 1. 2. 2. 2. 3. 6. 3. 6. 6. 8. 6. 8. 8. 0. 9. 4. 10. 8. 11.	et. 96 90 1 85 2 880 3 875 4 770 5 665 660 7 555 8 550 9 445 10 440 11	ct. 9 1.92 2.88 3.84 1.80 5.76 5.72 1.68 3.64 3.64 3.60 3.00	7 ct. 4 1.94 2.91 3.88 4.85 5.82 6.79 7.76 8.73 9.70 10.67 11.64 12.61	1.96 2.94 3.92 4.90 5.88 6.86 7.84 8.82 9.80 10.78 11.76 12.74	99 ct. 1.98 2.97 3.66 4.95 5.94 6.93 7.92 8.91 9.90 10.89 11.88 12.87	\$1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.	\$2. 4. 6. 8. 10. 12. 14. 16. 18. 20. 22. 24. 26.	\$3. 6. 9. 12. 15. 18. 21. 24. 27. 20. 33. 36. 39.
2 3 4 5 6 7 8 9 10 11 12 13 14	1.86 2.79 3.72 4.65 5.58 6.51 7.44 8.37 9.30 10.23 11.16 12.09 13.02	1.88 2.85 3.77 4.77 5.66 6.56 7.55 8.44 9.44 10.3 11.22 12.22	5. 95 c 88 1.92 2.36 3.0 4.1 5.8 6.0 9.1 10.1 11.1 12.2 12.2 12.2 12.2 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0	90 1 1 8 5 2 8 8 5 3 7 5 4 5 6 6 6 0 7 6 5 5 6 6 6 0 1 1 1 3 3 5 1 1 3 3 0 1 1 3 3 0 1 1 3	ct. 92 1.92 2.88 3.84 4.80 5.76 5.72 1.68 3.64 0.60 0.56 1.52 1.52 1.52 1.52 1.52 1.52	7 et. 2 1.94 2.91 3.88 4.85 5.82 6.79 7.76 8.73 9.70 [0.67 11.64 12.61 13.58	1.96 2.94 3.92 4.90 5.88 6.86 7.84 8.82 9.80 10.78 11.76 12.74 13.72	99 ct. 1.98 2.97 3.66 4.95 5.94 6.93 7.92 8.91 9.90 10.89 11.88 12.87 13.86	\$1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14.	\$2. 4. 6. 8. 10. 12. 14. 16. 18. 20. 22. 24. 26. 28.	\$3. 6. 9. 12. 15. 18. 21. 24. 27. 20. 33. 36. 39. 42.
2 5 6 7 8 9 10 11 12 13 14 15	1.86 2.79 3.72 4.65 5.58 6.51 7.44 8.37 9.30 10.23 11.16 12.09 13.02 13.95	1.88 2.85 3.77 4.77 5.66 6.56 7.55 8.44 9.44 10.3 11.22 13.10 14.10	5. 95 c 88 1.92 2.36 3.4 5.6 6.7 6.6 8.0 9.4 10.1 11.1 12.2 12.3 12.3 13.0 14.1 14.1 14.1 14.1 14.1 14.1 14.1 14	96 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ct. 92 1.92 2.88 3.84 1.80 5.76 5.72 1.68 3.64 0.60 0.56 1.52 1.52 1.52 1.42 1.40	7 et. 4 2.91 3.88 4.85 5.82 6.79 7.76 8.73 9.70 10.67 11.64 12.61 13.58 14.55	1.96 2.94 3.92 4.90 5.88 6.86 7.84 8.82 9.80 10.78 11.76 12.74 13.72 14.70	99 et. 1.98 2.97 3.66 4.95 5.94 6.93 7.92 8.91 9.90 10.89 11.88 12.87 13.86 14.85	\$1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15.	\$2. 4. 6. 8. 10. 12. 14. 16. 18. 20. 22. 24. 26. 28. 30.	\$3. 6. 9. 12. 15. 18. 21. 24. 27. 20. 33. 36. 39. 42. 45.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	1.86 2.79 3.72 4.65 5.58 6.51 7.44 8.37 9.30 10.23 11.16 12.099 13.02 13.95 14.88	1.88 2.83 3.70 4.70 5.66 6.50 7.55 8.44 10.3 11.22 12.21 13.11 14.11	8 1 8 2 6 3 8 6 8 6 8 6 8 8 6 10	90 1 90 2 85 2 88 3 775 4 66 60 7 70 5 66 0 7 70 1 80 2 80 3 70 4 80 3 80 3 70 4 80 3 80 3	ct. 92 2.88 3.84 4.80 5.76 5.72 6.68 8.64 9.60 9.56 1.52 1.40 1.40 1.536	7 et. 9 1.94 2.91 3.88 4.85 5.82 6.79 7.76 8.73 9.70 10.67 11.64 12.61 13.58 14.55 15.52	1.96 2.94 3.92 4.90 5.88 6.86 7.84 8.82 9.80 10.78 11.76 12.74 13.72 14.70 15.68	99 ct. 1.98 2.97 3.66 4.95 5.94 6.93 7.92 8.91 9.90 10.89 11.88 12.87 13.86 14.85 15.84	\$1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16.	\$2. 4. 6. 8. 10. 12. 14. 16. 18. 20. 22. 24. 26. 28. 30. 32.	\$3. 6. 9. 12. 15. 18. 21. 24. 27. 20. 33. 36. 39. 42. 48.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	1.86 2.79 3.72 4.65 5.58 6.51 7.44 8.37 9.30 10.23 11.16 12.09 13.02 13.95 14.88 15.81	1.88 2.83 3.70 4.70 5.6 6.56 7.55 8.44 10.3 11.2 12.22 13.10 14.11 15.0 15.9	8 1 8 2 6 3 1 5 8 6 8 6 9 9 1 1 1 1	90 1 2 2 2 2 2 2 2 1 4 2 2 2 1 1 5 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ct. 92 2.88 3.84 4.80 5.76 5.72 6.68 8.64 9.60 9.56 1.52 1.52 1.52 1.52 1.52 1.52 1.52 1.52	7 et. 4 2.91 3.88 4.85 5.82 6.79 7.76 8.73 9.70 11.64 12.61 13.58 14.55 15.52 16.49	1.96 2.94 3.92 4.90 5.88 6.86 7.84 8.82 9.80 10.78 11.76 12.74 13.72 14.70 15.68 16.66	99 ct. 1.98 2.97 3.66 4.95 5.94 6.93 7.92 8.91 9.90 10.89 11.88 12.87 13.86 14.85 15.84 16.83	\$1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16.	\$2. 4. 6. 8. 10. 12. 14. 16. 18. 20. 22. 24. 26. 28. 30. 32. 34.	\$3. 6. 9. 12. 15. 18. 21. 24. 27. 20. 33. 36. 39. 42. 45. 48. 51.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	1.86 2.79 3.72 4.65 5.58 6.51 7.44 8.37 9.30 10.23 11.16 12.09 13.02 14.88 15.81 16.74	1.88 2.83 3.70 4.77 5.66 6.56 7.55 8.44 9.44 10.3 11.2 12.2 13.11 14.11 15.00 16.9	8 1 8 2.2 2 3 9.0 4 4 5 8 6 9 4 10 8 11 12 12 12 13 14 15 16 17 18	90 1 85 2 87 4 87 6 66 66 66 66 66 66 66 66 66 66 66 66 66	ct. 9 1.92 2.88 3.84 1.80 5.76 5.72 1.68 4.64 1.52 1.52 1.52 1.52 1.52 1.52 1.53 1.44 1.40 1.5.36 1.5.32 1.38 1.38 1.38	7 ct. 1.94 2.91 3.88 4.85 5.82 6.79 7.76 8.73 9.70 10.67 11.64 12.61 12.61 13.58 14.55 15.52 16.49 17.46	1.96 2.94 3.92 4.90 5.88 6.86 6.86 10.78 11.78 12.74 13.72 14.70 15.68 17.64	99 ct. 1.98 2.97 3.66 4.95 5.94 6.93 7.92 8.91 9.90 10.89 11.88 12.87 13.86 14.85 15.84 16.83 17.82	\$1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16.	\$2. 4. 6. 8. 10. 12. 14. 16. 18. 20. 22. 24. 26. 28. 30. 32.	\$3. 6. 9. 12. 15. 18. 21. 24. 27. 20. 33. 36. 39. 42. 48.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	1.86 2.79 3.72 4.65 5.58 6.51 7.44 8.37 9.30 10.23 11.16 12.09 13.02 13.95 14.88 15.81	1.88 2.83 3.70 4.70 5.6 6.56 7.55 8.44 10.3 11.2 12.22 13.10 14.11 15.0 15.9	8 1 8 2.2 2 6 3 9 4 1 5 8 6 9 9 1 10 1 10	90 1 85 2 87 4 87 6 66 66 66 66 66 66 66 66 66 66 66 66 66	ct. 9 1.92 2.88 3.84 1.80 6.76 6.72 1.68 3.64 1.50 1.52 1.1	7 ct. 2 1.94 2.91 3.88 4.85 5.82 6.79 7.76 8.73 9.70 10.67 11.64 12.61 13.58 14.55 15.52 16.49 17.46 18.43 19.40	1.96 2.94 3.92 4.90 5.88 6.86 7.84 9.80 10.78 11.74 12.74 13.72 14.70 15.68 16.66 17.64 18.62 19.60	99 ct. 1.98 2.97 3.66 4.95 5.94 6.93 7.92 10.89 11.88 12.87 13.86 14.85 15.84 16.83 17.82 18.81 19.80	\$1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20.	\$2. 4. 6. 8. 10. 12. 14. 16. 18. 20. 22. 24. 26. 30. 32. 34. 36. 38. 40.	\$3. 6. 9. 12. 15. 18. 21. 27. 20. 33. 36. 39. 42. 45. 48. 51. 54. 57. 60.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 25	1.86 2.79 3.72 4.65 5.58 6.51 7.44 8.37 9.30 10.23 11.16 12.09 13.02 13.95 14.88 15.81 16.74 17.67 18.60 23.25	1.88 2.88 3.77 4.70 5.66 6.56 7.55 8.44 9.44 10.3 11.22 13.11 14.11 15.0 16.9 17.8 18.8 23.5	8 1.3 8 2.2 2.3 6 3.3 4.4 4 5.8 8 6.9 9.0 11.1 12.1 12.1 13.1 14.1 15.1 16.1 17.1 18.1 19.1	96 1 2 8 8 5 2 8 8 0 3 8 7 7 5 5 6 6 6 0 7 7 6 5 5 6 6 6 0 1 7 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6	ct. 92 2.88 3.84 5.76 5.72 6.68 0.60 0.56 1.52 1.40 1.53 1.40 1.53 1.28 1.30 1.40 1.40 1.40 1.40 1.40 1.40 1.40 1.4	7 ct. 2.91 3.88 4.85 5.82 6.79 7.76 8.73 9.70 10.67 11.64 12.61 13.58 14.55 15.52 16.49 17.46 18.43 19.40	1.96 2.94 3.92 4.90 5.88 6.86 7.84 8.82 10.78 11.76 12.74 13.72 14.70 15.68 17.64 18.62 19.60 24.50	99 et. 1.98 2.97 3.66 4.95 5.94 6.93 7.92 8.91 10.89 11.88 12.87 13.86 14.85 15.84 16.83 17.82 18.81 19.90 24.75	\$1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 20. 20. 20. 20. 20. 20. 20	\$2. 4. 6. 8. 10. 12. 14. 16. 18. 20. 22. 24. 26. 28. 30. 32. 34. 36. 38. 40. 50. 50. 50. 50. 50. 50. 50. 5	\$3. 6. 9. 12. 15. 18. 21. 24. 27. 20. 33. 36. 39. 42. 45. 48. 57. 60. 75.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30	1.86 2.79 3.72 4.65 5.58 6.51 7.44 8.37 9.30 10.23 11.16 12.09 13.02 13.95 14.88 15.81 16.74 17.67 18.60 23.25 27.90	1.88 2.88 3.77 4.77 5.6-655 7.55 8.44 9.44 10.3 11.22 12.22 13.14 14.11 15.0 15.9 17.8 18.8 23.5 29.2	8 1 8 2 6 3 6 4 5 8 6 6 8 6 9 9 10 14 11 12 12 12 13 16 14 15 16 13 17 17 18 18 16 18	et. 96 90 1 85 2 880 3 775 4 770 5 65 66 60 7 8555 8 445 10 440 11 335 12 330 13 225 14 220 18 110 13 005 18 000 19 775 24 550 28	ct. 92 2.88 3.84 3.80 5.76 5.72 3.68 3.64 0.60 0.56 1.52 1.40 5.36 1.40 1.53 1.40 1.40 1.53 1.53 1.53 1.53 1.53 1.53 1.53 1.53	7 ct. 1.94 2.91 3.88 4.85 5.82 6.79 7.76 8.73 9.70 10.67 11.64 12.61 13.58 14.55 15.52 16.49 17.46 18.43 19.40 24.25	1.96 2.94 3.92 4.90 5.88 6.86 7.84 8.82 9.80 10.78 11.76 12.74 13.72 14.70 15.68 16.66 17.64 17.64 17.60 17.60 17.60 17.60 17.60 17.60 17.60 17.60 17.60 17.60 17.60	99 ct. 1.98 2.97 3.66 4.95 5.94 6.93 7.92 8.91 9.90 11.88 12.87 13.86 14.85 15.84 16.83 17.82 17.82 18.81 19.80 24.75	\$1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 20. 20. 20. 20. 20. 20. 20	\$2. 4. 6. 8. 10. 12. 14. 16. 18. 20. 22. 24. 26. 28. 30. 32. 32. 34. 36. 38. 40. 50. 60. 60. 60. 60. 60. 60. 60. 6	\$3. 6. 9. 15. 18. 21. 22. 23. 36. 39. 42. 45. 48. 51. 57. 60. 75. 90.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30 40	1.86 2.79 3.72 4.65 5.58 6.51 7.44 8.37 9.30 10.23 11.16 12.09 13.02 13.95 14.88 15.81 16.74 17.67 18.60 23.25 27.90 37.20	1.88 2.88 3.77 4.77 5.66 6.55 7.55 8.44 9.44 10.3 11.22 13.14 14.11 15.0 15.9 17.8 18.8 23.5 23.7.6	5. 95 6 88 1 22 2 66 3 90 4 10 11 12 12 13 14 14 14 14 15 16 17 18 18 18 19	et. 96 90 1 85 2 880 3 8775 4 770 65 66 60 7 555 8 440 11 335 12 220 15 1005 18 000 13 775 2 220 15 000 3	ct. 92 2.88 3.84 5.76 5.76 5.76 5.76 5.68 4.64 0.60 0.56 1.52 1.52 1.52 1.52 1.53 1.40 1.53 1.40 1.53 1.24 1.40 1.53 1.24 1.30 1.30 1.30 1.30 1.30 1.30 1.30 1.30	7 ct. 2 1.94 2.91 3.88 4.85 5.82 6.79 7.76 8.73 9.70 10.67 11.64 12.61 12.61 12.61 12.61 12.61 12.61 12.61 12.61 12.61 12.61 12.61 12.61 12.61 12.61 12.61 12.61 12.61 13.88	1.96 2.94 3.92 4.90 5.88 6.86 7.84 10.78 11.76 1	99 ct. 1.98 2.97 3.66 4.95 5.94 6.93 7.92 8.91 9.90 10.89 11.88 12.87 13.86 14.85 15.84 16.83 17.82 18.81 19.80 24.75 29.70 39.00	\$1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 25. 30. 40. 40. 40. 40. 40. 40. 40. 4	\$2. 4. 6. 8. 10. 12. 14. 16. 18. 20. 22. 24. 26. 28. 30. 32. 34. 36. 38. 40. 50. 60. 80.	\$3. 6. 9. 12. 15. 18. 21. 24. 27. 20. 33. 36. 39. 42. 45. 48. 51. 54. 57. 60. 120.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30 40 40 50 50 50 50 50 50 50 50 50 50 50 50 50	1.86 2.79 3.72 4.65 5.58 6.51 7.44 8.37 9.30 10.23 11.16 12.09 13.02 13.95 14.88 15.81 16.74 17.67 18.60 23.25 27.90 37.20 46.50	1.88 2.88 3.70 4.77 5.6 6.56 7.55 8.44 10.3 11.22 12.22 13.11 15.00 15.99 17.88 18.88 23.5 29.2 37.60	8 1.2 2.3 3.0 4.4 5.6 8.9 9.4 10.0 19.9 11.1 12.2 12.2 12.4 15.5 16.6 13.1 14.4 15.6 16.1 19.0 19.0 19.0 19.0 19.0 19.0 19.0 23.0 0 28.0 0 347.	et. 96 90 1 85 2 885 3 775 4 665 665 6 65 55 8 90 1 13330 13 330 13 3225 14 15 16 10 17 75 2 20 2 30 30 30 35 50 30 30 35 50 30 30 35 50 30 30 30 35 50 30 30 30 35 50 30 30 30 30 35 50 30 30 30 30 30 35 50 30 30 30 30 30 30 30 30 30 30 30 30 30	ct. 92 1.92 2.88 3.84 4.80 5.76 5.72 1.68 3.64 1.52 1.52 1.52 1.52 1.52 1.53	7 ct. 2 1.94 2.91 3.88 4.85 5.82 6.79 7.76 8.73 9.70 10.67 11.64 12.61 13.58 14.55 14.55 16.49 17.46 18.43 19.40 1	1.96 2.94 3.92 5.88 6.86 6.86 10.78 11.76 12.74 13.72 14.70 15.68 16.66 17.64 18.62 19.60 24.50 29.40 39.20 49.00	99 ct. 1.98 2.97 3.66 4.95 5.94 6.93 7.92 8.91 9.90 11.88 12.87 13.86 14.85 15.84 16.83 17.82 18.81 19.90 24.75 29.70 39.00 49.50	\$1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 20. 20. 20. 40. 40. 40. 40. 40. 40. 40. 4	\$2. 4. 6. 8. 10. 12. 14. 16. 18. 20. 22. 24. 26. 28. 30. 32. 34. 36. 60. 80. 100.	\$3. 6. 9. 12. 15. 18. 21. 24. 27. 20. 33. 36. 39. 42. 45. 48. 51. 54. 57. 60. 120. 150.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30 40 50 60 70 70 70 70 70 70 70 70 70 70 70 70 70	1.86 2.79 3.72 4.65 5.58 6.51 7.44 8.37 9.30 10.23 11.16 12.09 13.02 13.95 14.88 15.81 16.74 17.67 18.60 23.25 27.90 37.20 46.50	1.88 2.88 3.77 4.77 5.66 6.55 7.55 8.44 9.44 10.3 11.22 13.11 14.11 15.0 15.9 17.8 23.5 29.2 37.6 47.0 956.4	8 1 95 6 3 4.4 5 8 6 8 11 12	et. 96 90 1 85 2 85 2 86 3 775 4 66 5 65 66 65 65 8 55 8 10 11 11 11 11 11 11 11 11 11 11 11 11	ct. 92 2.88 3.84 4.80 5.72 5.68 6.64 0.56 0.56 1.52 1.40 1.52 1.40 1.53 1.40 1.53 1.40 1.53 1.40 1.53 1.40 1.53 1.40 1.53	7 ct. 2 1.94 3.88 4.85 5.82 6.79 7.76 8.73 9.70 10.67 11.64 12.61 12.61 12.55 16.49 17.46 18.43 19.40 24.25 29.10 19.40 24.25 29.10 19.40 24.25 29.10 20.10	1.96 2.94 3.92 4.90 5.88 6.86 7.84 8.82 10.78 11.76 12.74 13.72 14.70 15.68 16.66 117.64 18.62 19.60 1	99 ct. 1.98 2.97 3.66 4.95 5.94 6.93 7.92 8.91 10.89 11.88 12.87 13.86 14.85 15.84 16.83 17.82 18.81 19.90 24.75 29.70 39.90 49.50 59.40 69.30	\$1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 20. 40. 60. 60. 60. 70. 80. 90. 10. 10. 10. 10. 10. 10. 10. 1	\$2. 4. 6. 8. 10. 12. 14. 16. 18. 20. 22. 24. 26. 30. 32. 34. 36. 38. 40. 60. 80. 100. 120.	\$3. 6. 9. 12. 15. 18. 21. 24. 27. 20. 33. 36. 39. 42. 45. 51. 54. 57. 60. 120. 150. 180. 210.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30 40 40 60 60 7 80 80 80 80 80 80 80 80 80 80 80 80 80	1.86 2.79 3.72 4.65 5.58 6.51 7.44 8.37 9.30 10.23 11.16 12.09 13.02 14.88 15.81 16.74 17.67 18.60 23.25 27.90 37.20 46.50 55.80 65.10 74.40	1.88 2.83 3.77 4.77 5.66 6.55 7.55 8.44 10.3 11.2 12.2 13.11 15.0 15.9 16.9 17.8 18.8 23.5 29.2 37.6 47.0 56.4 65.8	5. 95 c 2 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2	ct. 96 990 1 18 960 2 2 8 80 2 2 7 770 5 66 960 7 7 96 60 7 9	ct. 99 .92 .88 .89 .80 .64 .66 .66 .66 .65 .33 .32 .34 .34 .10 .35 .36 .35 .37 .38 .40 .40 .40 .55 .66 .66 .66 .66 .66 .66 .66 .66 .66	7 ct. 4 1.94 2.91 2.91 2.91 2.91 2.91 2.91 2.91 2.91	8 et. 1.96 2.94 4.90 5.88 8.82 9.80 10.78 11.76	99 ct. 1.98 2.97 3.66 4.95 5.94 6.93 7.92 8.91 9.10.89 11.88 11.81 12.87 13.86 15.84 16.83 11.80 16.83 17.92 18.81 19.80 69.30 69.30	\$1. 2. 3. 4. 6. 6. 7. 7. 8. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 25. 30. 40. 60. 70. 80.	\$2. 4. 6. 8. 10. 12. 14. 16. 18. 20. 22. 24. 26. 28. 30. 32. 34. 36. 38. 40. 50. 60. 120. 1120. 1142.	\$3. 9. 12. 15. 18. 21. 24. 27. 20. 33. 36. 39. 42. 45. 48. 51. 54. 57. 60. 120. 110. 120. 110. 240.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 25 30 40 50 60 70 70 70 70 70 70 70 70 70 70 70 70 70	1.86 2.79 3.72 4.65 5.58 6.51 7.44 8.37 9.30 10.23 11.16 12.09 13.02 13.95 14.88 15.81 16.74 17.67 18.60 23.25 27.90 37.20 46.50 55.80 65.10	1.88 2.88 3.77 4.77 5.6 6.55 7.55 8.44 9.44 10.3 11.22 12.22 13.11 14.11 15.90 16.99 17.88 23.25 29.26 47.00 56.48	95 c 2 2 2 3 3 4 4 5 5 6 2 2 7 7 6 6 6 18 8 16 14 4 15 6 6 18 8 16 14 18 16 18 18 18 18 18 18 18 18 18 18 18 18 18	ct. 96 990 1	ct. 9 9	7 ct. \$\frac{1.94}{2.91}\$ 3.88 4.85 5.82 6.79 7.76 8.73 9.70 10.67 11.64 12.61 13.58 14.55 16.49 17.46 18.43 19.40	8 ct. 1.96 2.94 4.90 5.88 5.88 5.88 6.86 7.84 11.76 11.76 12.74 13.74 13.60 17.64 18.62 19.60 19	99 ct. 1.98 2.97 3.66 4.95 5.94 6.93 7.92 8.91 10.89 11.88 12.87 13.86 14.85 15.84 16.83 17.82 18.81 19.90 24.75 29.70 39.90 49.50 59.40 69.30	\$1. 2. 3. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 30. 40. 40. 50. 60. 70. 70. 70. 70. 70. 70. 70. 7	\$2. 4. 6. 8. 10. 12. 14. 16. 18. 20. 22. 24. 26. 30. 32. 34. 36. 38. 40. 60. 80. 100. 120.	\$3. 6. 9. 12. 15. 18. 21. 24. 27. 20. 33. 36. 39. 42. 45. 51. 54. 57. 60. 120. 150. 180. 210.

Table Showing the Value of Coal and Straw

6	3 8	3	.75	13	\$2	$2\frac{1}{4}$	$2\frac{1}{2}$	28/4	Weight	\$3	31/4	31/2	\$4	41/2	\$5	\$6
		00 01	.00	.01	.01	.01	.01	.01	10		.02	.02	.02	.02	.03	
11.0	00 .	01	.01	.03	.03	.03	.04	.04	30	.05	.05	.05	.06	.07	.08	.09
		01 01	.02	.04	.04	.05	.05	.06	40 50		.07	.07	.08	.09	.10 .13	.15
31.0	01 .	02 02	.02	.05	.06	.07	.08	.08	60	.09	.10	.11	.12	.14	.15	.18
11.0	01 .	02	.03	.06	.07	.08	.09	.10 .11	70	.12	.11	.12	.14	.16 .18	.18 .20 .23	.24
	$\begin{bmatrix} 01 \\ 01 \end{bmatrix}$.	02 03	.03	.08	.09	.10 .11	.11 .13	.12	90 100		.15 .16	.16	.18	.20	.23	.27
	13 .	25	.38	.88	1.00	1.13	1.25	1.38	1000	1 50	1.63	1.75	2.00	2.25	2.50	3.00
	15 .	28 30	.42	.96 1.05		1.24 1.35	1.38 1.50	1.65	1100 1200	1.80	1.79 1.95	2.10	2 40	$\frac{2.48}{2.70}$	3.00	3.60
	16 . 18 .	33 35	.49 .53	1.14 1.23		1.46 1.58	$\frac{1.63}{1.75}$	$1.79 \\ 1.93$	1300 1400	1.95	2.11	2.28 2.45 2.63	2.60	2.93	3.25	3,90 4.20
	19 .	38	.56	1.31	1.50	1.69	1.88	2.06	1500	$\tilde{2}.25$	2.44	2.63	3.00	3.38	3.75	4.50
11.5	21	40 43	.60	1.40 1.49	1.60 1.70		$\frac{2.00}{2.13}$	2.20 2.34	1600 1700	2.40 2.55	$\frac{2.60}{2.76}$	2.80 2.98	3.20 3.40	3.60	4.00	
11:	23 . 24 .	45 48	.68 .71	1.58	1.80 1.90	2.03	2.25	2.48	1800 1900	2.70	2.93	3.15 3.33	3.60	4.05	4.50	5.40 5.70
11.5	26 .	53	.79	1.84	2.10	2.36	2.63	2.89	12100	13.15	3.41	3.68	4.201	4.73	5.25	6.30
		55 58	.83 .86			2.48 2.59	2.75	3.03 3.16	2200 2300	3.30 3.45		3.85 4.03				
11.3	30 .	60 63	.90	2.10	2.40	2.70	3.00	3.30	2400	3.60	3.90	4.20	4.80	5.40	6.00	7.20
11.3	33 .	65	.94 .98	2.28	2.60			3.44 3.58	2500 2600	13.90	4.23		5.20	5.85		7.80
		68 1 70 1		2.36	$\frac{2.70}{2.80}$	3.04	3.38	3.71	2700 2800	4.05 4.20		4.73 4.90	5.40	6.08	6.75	
	36	73 1	1.09	2.54	2.90	3.26	3.63	3.99	2900 3000	4.35	4.71	5.08	5.80	6.53	7.25	8.70
11:						٧.				14.50	4.88	5.25	6.00	6.75	7.50	9.00
11_	•	otn	er.	aru	cles:	ROIG	DV	ine :	Lon							- 4
11 4	PP	1 40				-				101	1.4	115	1 1/	91.	1 107 1	10
1	\$7	\$	8	\$9	10	11	1	2	Veight	13	14	15	10	_ 1	17	18
	.04		8 .04 .08	\$9	.05	11	1 1	2 .06 .12	Veight	.07	.07	.08		08 16	.09	.09
	.04		8 .04 .08 .12 .16	.05 .09 .14	.05 .10 .15	11	1 1 1 1 1 7 2 2	2 .06 .12 .18 .24	leight 10 20 30	.07	.07	.08		08 16 24 32	.09	.09
-	.04 .07 .11 .14		8 .04 .08 .12 .16	.05 .09 .14	.05 .10 .15	11	1 1 1 1 1 7 2 2	2 .06 .12 .18 .24 .30	10 20 30 40 50	.07	.07 .14 .21 .28 .35	.08 .15 .23 .30		08 16 24 32 40	.09 .17 .26 .34 .43	.09 .18 .27 .36 .45
	.04 .07 .11 .14 .18		8 .04 .08 .12 .16 .20 .24	.05 .09 .14 .18 .23	.05 .10 .15 .20 .25 .30	11 .0 .1 .1 .2 .2 .2 .2 .3 .3	1 1 06 11 17 22 28 33 39	2 V .06 .12 .18 .24 .30 .36 .42	10 20 30 40 50 60	.07 .13 .20 .26 .33 .39 .46	.07 .14 .21 .28 .35 .42	.08 .15 .23 .30 .38 .45		08 16 24 32 40 48 56	.09 .17 .26 .34 .43 .51	.09 .18 .27 .36 .45 .54
-	.04 .07 .11 .14 .18 .21 .25		8 .04 .08 .12 .16 .20 .24 .28 .32	.05 .09 .14 .18 .23 .27 .32	.05 .10 .15 .20 .25 .30 .35	11 .0 .1 .1 .1 .2 .2 .2 .2 .3 .3 .3 .4	1 1 106 11 17 22 28 13 13 13 14	2 V .06 .12 .18 .24 .30 .36 .42 .48	10 20 30 40 50 60 70	.07 .13 .20 .26 .33 .39 .46 .52	.07 .14 .21 .28 .35 .42 .49	.08 .15 .23 .30 .38 .45 .59		08 16 24 32 40 48 56 64	.09 ,17 .26 .34 .43 .51 .60	.09 .18 .27 .36 .45 .54 .63
	.04 .07 .11 .14 .18 .21 .25 .28 .32		8 .04 .08 .12 .16 .20 .24 .28 .32 .36 .40	.05 .09 .14 .18 .23 .27 .32 .36 .41	.05 .10 .15 .20 .25 .30 .40 .45	11 .0 .1 .1 .2 .2 .3 .4 .5	1 1 06 11 17 22 28 33 39 14 60 55	2 \ \ .06 \ .12 \ .18 \ .24 \ .30 \ .36 \ .42 \ .48 \ .54 \ .60 \ \ \ \ .60 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	10 20 30 40 50 60 70 80 90	.07 .13 .20 .26 .33 .39 .46 .52 .59	.07 .14 .21 .28 .35 .42 .49 .56	.08 .15 .23 .30 .38 .45 .60 .68		08 16 24 32 40 48 56 64 72 80	.09 .17 .26 .34 .43 .51 .60 .68 .77 .85	.09 .18 .27 .36 .45 .54 .63 .72 .81
	.04 .07 .11 .14 .18 .21 .25 .28 .35 3.50 3.85	4.4	8 .04 .08 .12 .16 .20 .24 .28 .32 .36 .40 .00 .40	.05 .09 .14 .18 .23 .27 .32 .36 .41 .45 4.50 4.95	.05 .10 .15 .20 .25 .30 .35 .40 .45 .50 5.50	11 -0 -1 -1 -2 -2 -2 -2 -3 -4 -5 -5 -5 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6	1 1 106 11 17 22 28 13 39 14 60 55 60 60 60 60 60 60 60 60 60 60 60 60 60	2 \ \(\bar{0} \) \(\bar{0} \	10 20 30 40 50 60 70 80 90 100	.07 ,13 ,20 ,26 ,33 ,39 ,46 ,52 ,59 ,65 6,50 7,15	.07 .14 .21 .28 .35 .42 .49 .56 .70 7.00 7.70	.08 .15 .23 .30 .38 .45 .60 .68 .75 7.50 8.25	8. 8. 8.	08 16 24 32 40 48 56 64 72 80	.09 .17 .26 .34 .43 .51 .60 .68 .77 .85 8.50 9.35	.09 .18 .27 .36 .45 .54 .63 .72 .81 .90 9.00 9.90
	.04 .07 .11 .14 .18 .21 .25 .28 .32 .35 3.50 3.85 4.20	4.4.4	8 .04 .08 .12 .16 .20 .24 .28 .32 .36 .40 .00 .40	.05 .09 .14 .18 .23 .27 .32 .36 .41 .45 4.50 4.95 5.40	.05 .10 .15 .20 .25 .30 .45 .50 5.50 6.00	11 .0 .1 .1 .2 .2 .2 .2 .3 .4 .5 .5 .5 .6 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	1 1 06 11 17 22 28 33 39 14 60 65 60 65 60 60 60 7	2 106 12 18 24 30 36 42 48 54 60 160 100	10 20 30 40 50 60 70 80 90 1000 1000	.07 ,13 ,20 ,26 ,33 ,39 ,46 ,52 ,59 ,65 6,50 7,15 7,80	.07 .14 .21 .28 .35 .42 .49 .56 .70 7.70 8.40	.08 .15 .23 .30 .38 .41 .59 .60 .68 .75 7.50 8.21 9.00	8. 8. 9.	08 16 24 32 40 48 56 64 72 80 00 80	.09 .17 .26 .34 .43 .51 .60 .68 .77 .85 8.50 9.35 0.20	.09 .18 .27 .36 .45 .54 .63 .72 .81 .90 9.00 9.90 10.80
	.04 .07 .11 .14 .18 .21 .25 .28 .35 .35 4.20 4.55 4.90	4.4.4.5.5.5.	8 .04 .08 .12 .16 .20 .24 .28 .32 .36 .40 .40 .40 .80 .20 .60	.05 .09 .14 .18 .23 .27 .32 .36 .41 .45 4.50 4.95 5.40 5.85 6.30	.05 .10 .15 .20 .25 .30 .35 .40 .50 .5.00 .5.50 .6.00 .7.00	11 .0 .1 .1 .2 .2 .2 .2 .3 .4 .5 .5 .5 .6 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	1 1 06 11 17 22 28 33 39 14 60 65 60 65 60 60 60 7	2 V .06 .12 .18 .24 .30 .36 .42 .48 .54 .60 .60 .20 .80 .80 .40 .80 .40 .80 .40 .80 .40	10 20 30 40 50 60 70 80 90 100 100 100 200 400	.07 ,13 .20 ,26 .33 .39 .46 .52 .59 .65 6.50 7.15 7.80 8.45 9.10	.07 .14 .21 .28 .35 .42 .49 .56 .63 .70 7.70 8.40 9.10 9.80	.08 .15 .23 .30 .38 .45 .59 .60 .68 .75 7.50 8.25 9.00 9.75	8. 8. 9. 10. 11.	08 16 24 32 40 48 56 64 72 80 00 80 10 40 11 20 1	.09 .17 .26 .34 .43 .51 .60 .68 .77 .85 8.50 9.35 0.20 1.05 1.90	.09 .18 .27 .36 .45 .54 .63 .72 .81 .90 9.00 10.80 11.70 12.60
	.04 .07 .11 .14 .18 .21 .25 .28 .35 .35 4.20 4.55	4.4.4.5.5.6.6.6.	8 .04 .08 .12 .16 .20 .24 .28 .32 .36 .40 .40 .80 .20 .60 .00 .40	.05 .09 .14 .18 .23 .27 .32 .36 .41 .45 4.50 4.95 5.40 5.85	.05 .10 .15 .20 .25 .30 .45 .50 .5.00 .5.50 .6.50 .7.00 .7.50 .8.00	11 -0 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1	1 1 106 11 17 22 28 33 39 44 60 55 60 60 65 77 78 78 78 78 78 78 78 78 78 78 78 78	2 V .06 .12 .18 .24 .30 .36 .42 .48 .54 .60 .20 .20 .20 .30	10 20 30 40 50 60 70 80 90 100 100 100 100 100 100 100	.07 ,13 ,20 ,26 .33 .39 .46 .52 .59 .65 6.50 7.15 7.80 9.10 9.75	7.07 .14 .21 .28 .35 .42 .49 .56 .63 .70 7.70 8.40 9.10 9.80 10.50	7.50 8.22 9.00 9.75 9.00 11.25	8. 8. 9. 10. 11. 12. 12. 12. 12.	08 16 24 32 40 48 56 64 72 80 00 12 40 1 20 1 80 1 1	.09 .17 .26 .34 .43 .51 .60 .68 .77 .85 8.50 9.35 0.20 1.05	.09 .18 .27 .36 .45 .54 .63 .72 .81 .90 9.90 10.80 11.70 12.60 13.50 14.40
	.04 .07 .11 .18 .21 .25 .28 .35 .35 .35 .4.20 4.55 54.90 5.25 5.95	4. 4. 4. 5. 5. 6. 6. 6.	8 .04 .08 .12 .16 .20 .24 .28 .32 .36 .40 .40 .80 .20 .60 .00 .40 .80 .80 .80 .80 .80 .80 .80 .8	\$9 .05 .09 .14 .18 .23 .27 .32 .36 .41 .45 .4.50 4.95 5.85 6.30 6.720 7.65	10 .05 .10 .15 .20 .25 .30 .45 .40 .50 .5.50 .6.60 .7.50 .8.60 .8.50	11 -01 -12 -22 -23 -34 -45 -55 -60 -60 -60 -70 -70 -70 -70 -70 -70 -70 -70 -70 -7	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 V .06 .12 .18 .24 .30 .36 .42 .48 .54 .54 .60 .20 .80 .80 .40 .20 .80 .40 .20	10 20 30 40 50 60 70 80 100 100 1200 1200 400 1500	.07 ,13 .20 .26 .33 .39 .46 .52 .65 6.50 7.15 7.80 8.45 9.10 9.75 10 40	7.00 7.00 7.00 7.70 9.10 9.80 10.50 11.20	7.50 3.80 3.80 3.80 3.80 5.53 6.60 6.68 7.50 7.50 9.76 10.50 11.25 12.00	8. 8. 9. 10. 11. 12. 12. 12. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13	08 16 24 32 40 48 56 64 72 80 00 12 12 10 10 11 10 11	.09 .17 .26 .34 .43 .51 .60 .68 .77 .85 .850 9.35 0.20 1.90 2.75 3.60 4.45	.09 .18 .27 .36 .45 .54 .63 .72 .81 .90 9.90 10.80 11.70 12.60 13.50 14.40 15.30
	.04 .07 .11 .14 .18 .21 .25 .28 .35 .35 .3.50 .3.85 .4.20 .4.55 .5.95 .6.30 .6.65	4. 4. 4. 5. 6. 6. 6. 7. 7.	8 .04 .08 .12 .16 .20 .24 .28 .32 .36 .40 .40 .40 .80 .20 .40 .40 .80 .20 .60 .60 .60 .60 .60 .60 .60 .6	.05 .09 .14 .18 .23 .36 .41 .45 4.50 4.95 5.85 6.30 6.75 7.20 7.65 8.10 8.55	10 -055 -10 -110 -120 -255 -30 -335 -340 -455 -500 -6.50 -7.50 -6.50 -7.	11 .00 .11 .22 .23 .33 .44 .55 .55 .60 .60 .60 .71 .77 .77 .88 .88 .88 .88 .88 .88	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 V 06 12 18 24 30 336 42 48 54 60 1 20 1 60	10 20 30 40 50 60 70 90 100 100 200 100 400 400 600 1700	.07 ,13 ,20 ,26 ,33 ,39 ,46 ,52 ,59 ,65 6,50 7,18 9,75 10 40 11 05 11 05 11 1.75	.07 .14 .21 .28 .35 .42 .49 .56 .63 .7 00 7.70 8.40 9.10 9.80 11.20 11.20 11.20 13.30	7.50 8.22 9.00 11.25 12.00 11.25 12.00 14.25	8. 8. 9. 10. 11. 12. 12. 13. 14. 15. 15. 14. 15. 15. 15. 15. 16. 17. 17. 17. 17. 17. 17. 17. 17. 17. 17	08 10 10 10 10 10 10 10	.09 ,17 .26 .34 .51 .60 .68 .77 .85 .850 .9.35 0.20 1.05 0.20 1.05 2.75 3.60 2.75 3.60 2.75 3.60 3.60 3.60 3.60 3.60 3.60 3.60 3.60	.09 .18 .27 .36 .45 .54 .63 .72 .81 .90 9.00 9.90 10.80 11.70 12.60 13.50 14.40 15.30 16.20 17.10
	.04 .07 .11 .14 .18 .21 .25 .28 .35 .35 .3.50 .3.85 .4.20 .4.55 .5.60 .5.95 .6.30	4.4.5.5.6.6.6.77.8.8.8.	8 .04 .08 .12 .16 .20 .24 .28 .32 .36 .40 .40 .40 .80 .20 .40 .40 .40 .40 .40 .40 .40 .4	.05 .09 .14 .18 .23 .36 .41 .4.50 4.95 5.40 4.95 5.40 7.65 8.10 8.55 9.45 9.90	10 .055.10 .110 .220 .255.30 .355.44 .455.50 .5.50 .6.00 .6.50 .7.00 .8.50 .9.50 .9.50 .10.50 .10.50	11 .0 .1 .1 .2 .3 .3 .4 .5 .5 .6 .6 .6 .7 .1 .7 .7 .7 .7 .9 .8 .8 .8 .8 .8 .8 .8 .8 .8 .8	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 \\ \text{0.06} \\ \text{1.12} \\ \text{1.18} \\ \text{2.34} \\ \text{4.33} \\ \text{3.36} \\ \text{4.22} \\ \text{4.48} \\ \text{5.4} \\ \text{6.60} \\ \text{1.20} \\ \text{1.18} \\ \text{1.18} \\ \text{6.00} \\ \text{1.18} \\ \t	10 20 40 50 100 100 100 100 100 100 100 100 100	.07 .13 .20 .26 .33 .39 .46 .52 .59 .650 7.15 7.80 8.45 9.75 10.40 11.05 11.70 12.35 14.30	.07 .14 .21 .28 .35 .42 .49 .56 .63 .70 7.70 9.10 9.80 111.20 111.20 112.60 114.70 14.70 15.40	7.50 -38 -38 -45 -68 -7.50 -68 -7.50 -9.75 10.50 11.25 12.75 13.50 14.25 15.75 16.50	8. 8. 9. 10. 11. 13. 14. 15. 15. 15. 17. 17. 17. 17. 17. 17. 17. 17. 17. 17	08 16 16 16 16 16 16 16 16 16 16 16 16 16	.09 ,17 ,28 ,34 ,43 ,51 ,60 ,68 ,77 ,85 ,85 ,9,35 ,9,35 ,9,35 ,9,35 ,105 ,11,90 ,2,75 ,3,60 ,4,43 ,51 ,51 ,51 ,51 ,51 ,51 ,51 ,51 ,51 ,51	.09 .18 .27 .36 .45 .54 .63 .72 .81 .90 9.90 10.80 11.70 12.60 13.50 14.40 15.30 16.20 17.10 19.80
	.04 .07 .11 .14 .21 .25 .28 .35 .35 .35 .4.20 .4.55 .4.90 .5.25 .5.95 .6.65 .7.70 .8.05	4.4.4.5.5.6.6.6.6.7.7.8.8.9.	8 04 08 12 16 20 24 28 32 36 40 40 40 40 40 40 40 40 40 40	\$9 .05 .09 .14 .18 .23 .27 .32 .36 .41 .45 .4.50 .55.85 .6.30 .7.20 .7.20 .7.20 .8.55 .9.45 .9.90 .9.90 .9.90	10 -055-10 -110 -120 -225-33 -335-33 -445 -506 -5.506 -6.506 -7.506 -7.506 -8.000 -7.506 -9.5	11 .0 .1 .1 .2 .2 .3 .3 .4 .5 .5 .6 .6 .6 .6 .7 .1 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 \\ \text{0.06} \\ \text{1.12} \\ \text{1.18} \\ \text{2.34} \\ \text{4.33} \\ \text{3.36} \\ \text{4.22} \\ \text{4.48} \\ \text{5.4} \\ \text{6.60} \\ \text{1.20} \\ \text{1.18} \\ \text{1.18} \\ \text{6.00} \\ \text{1.18} \\ \t	10 20 40 50 100 100 100 100 100 100 100 100 100	.07 ,13 ,20 ,26 ,39 ,46 ,52 ,65 6.50 7.15 7.80 9.75 10.40 11.70 12.35 11.65 11.40 14.95	.07 .14 .21 .28 .35 .42 .49 .56 .63 .70 7 .00 9 .10 .90 10 .50 11 .90 11 .90 11 .50 11	.080 .151 .222 .333 .388 .444 .485 .555 .606 .688 .777 .7.50 .9.79 .10.50 .11.25 .11.2	8. 8. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 18. 18. 18. 18. 18. 18. 18. 18. 18	08	.09 ,17 ,28 ,34 ,48 ,51 ,60 ,68 ,77 ,85 ,9,35 ,0,20 ,0,20 ,1,05 ,1,90 ,2,75 ,3,60 ,4,45 ,5,30 ,5,18 ,5,30 ,5,18 ,5,30 ,5 ,5,30 ,5 ,5,30 ,5 ,5,30 ,5 ,5 ,5 ,5 ,5 ,5 ,5 ,5 ,5 ,5 ,5 ,5 ,5	.09 .18 .27 .36 .45 .54 .63 .72 .81 .90 9.90 10.80 11.70 12.60 13.50 14.40 15.30 16.20 17.10 18.90 19.90 20.70
	.04 .07 .111 .18 .21 .25 .35 .35 .35 .35 .44 .55 .66 .65 .75 .76 .76 .76 .76 .76 .76 .76 .76 .76 .76	4.4.4.5.5.6.6.6.7.7.7.8.8.8.9.9.9.10.	8 04 08 112 116 220 24 28 32 36 40 40 40 80 80 80 80 80 80 80 80 80 8	\$9 .05 .09 .14 .23 .27 .326 .41 .45 .4.95 .5.85 .6.30 .7.65 .8.10 .9.45 .9.90 .10.80 .10.80 .11.25	10 .05 .10 .15 .22 .25 .33 .35 .50 .50 .6.60 .6.56 .7.00 .8.56 .9.00 .8.56 .11.00 .11.50 .11.00 .11.20 .12.20 .12.20 .11.20 .10.	11 -6 -1 -1 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 1 1 2 1 1 2 1 2 1 2 1 2 2	10 20 30 40 50 60 70 80 90 100 200 400 500 100 200 400 100 200 800 100 200 400 200 200 200 200 200 200 200 2	.07 ,13 ,20 ,26 .33 .39 .46 .52 .65 .65 .7,15 .845 .9,10 .9,76 .11,70 .11,05 .11,05 .12,36 .14,30 .14,30 .14,30 .14,50 .15,60 .14,50 .15,60 .16,50 .1	.07 .14 .21 .28 .35 .42 .49 .56 .63 .7.70 8.40 9.10 .9.10 .11.90 111.90 111.90 113.30 14.70 16.10 16.10 16.10 17.50	.08 .18 .38 .38 .55 .66 .77 .7.55 .8.22 .11.25 .11.25 .12.00 .12.75 .13.55 .17.25 .17.25 .17.25 .17.25 .18.75	8. 8. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 18. 18. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19	08	.09 .17 .28 .34 .43 .51 .68 .77 .85 .85 .9.35 .0.20 .1.05 .1.90 .5.15 .5.30 .5.15 .5.30 .5.15 .5.30 .5.15 .5.30 .5.15 .5.30 .5.15 .5.30 .50 .50 .50 .50 .50 .50 .50 .50 .50 .5	.09 .18 .27 .36 .45 .54 .63 .72 .81 .90 .9.90 10.80 11.70 12.60 13.50 14.40 115.30 16.20 17.10 18.90 19.80 20.70 22.50
	.04 .07 .11 .14 .25 .28 .35 .35 .35 .35 .4.20 .55 .95 .6.65 .7.35 .7.70 .70	4.4.4.5.5.6.6.6.7.7.8.8.9.9.10.10.	8 04 08 112 16 22 22 22 28 32 36 40 40 40 40 40 40 40 40 40 40	.05 .09 .14 .18 .23 .27 .32 .36 .41 .45 .4.50 .4.95 .5.40 .6.75 .7.20 .8.55 .9.40 .10 .35 .40 .10 .10 .10 .10 .10 .10 .10 .10 .10 .1	100 -050 -100 -118 -200 -250 -300 -300 -445 -450 -5.50 -6.50 -7.50	11 -0 -1 -1 -1 -1 -2 -2 -2 -2 -3 -3 -4 -5 -5 -6 -6 -6 -6 -6 -6 -7 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 1 1 2 1 1 2 1 1 2 1 1	reight 10 10 10 10 10 10 10 10 10 10 10 10 10	.07 ,13 ,20 ,26 ,33 ,39 ,46 ,52 ,59 ,65 ,67,15 ,7,80 ,9,75 10,40 111,70 12,35 111,70 12,35 14,95 15,60 14,95 15,60 16,25	.07 .14 .21 .28 .35 .42 .49 .56 .63 .7,70 .7,70 .8,40 .9,10 .10,50 .11,20 .10,2	.08 .18 .22 .38 .38 .38 .55 .66 .66 .77 .7.55 .8.22 .9.70 .9.77 .11.25 .12.25 .12.25 .12.25 .12.25 .12.25 .12.25 .12.25 .12.25 .12.25	8. 8. 9. 10. 11. 15. 16. 17. 18. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19	08	.09 .17 .28 .34 .43 .51 .60 .68 .77 .85 .8.50 .9.35 .9.35 .9.35 .9.35 .5.30 .1.05 .5.15 .5.30 .5.15 .5.30 .5.15 .5.15 .5.15 .5.15 .5.20 .5.15 .5.20 .5.15 .5.20 .5	.09 .18 .27 .36 .45 .63 .72 .81 .9.90 9.90 10.80 11.70 12.60 13.50 14.40 15.30 16.00 17.10 18.90 19.00 19.00 19.00 19.00 19.00 19.00 19.00 19.00 19.00 19.00
	.04 .07 .11 .14 .18 .21 .25 .28 .32 .3.50 3.85 4.20 6.65 5.95 6.35 6.65 7.35 7.70 8.05 8.70 9.45	4.4.4.5.5.6.6.6.7.7.8.8.9.9.10.10.10.	8 04 08 112 16 20 24 228 332 36 40 40 40 80 80 80 80 80 60 60 60 60 60 60 60 60 60 6	.05 .09 .14 .18 .23 .27 .36 .41 .4.50 .4.95 .5.85 .6.75 .7.20 .9.45 .9.45 .9.45 .9.45 .9.45 .9.10 .8.10 .8.10 .8.11 .8.1	10 .05 .10 .15 .22 .25 .33 .35 .50 .50 .6.60 .6.56 .7.00 .8.56 .9.00 .8.56 .11.00 .11.50 .11.00 .11.20 .12.20 .12.20 .11.20 .10.	111 -60 -11 -22 -22 -33 -34 -55 -56 -60 -60 -71 -71 -72 -82 -83 -84 -85 -85 -85 -85 -85 -85 -85 -85	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 100 10	reight 10 10 10 10 10 10 10 10 10 10 10 10 10	.07 ,13 ,20 ,26 ,33 ,39 ,46 ,52 ,59 ,65 ,65 ,7,15 ,7,80 ,9,75 ,10 ,40 ,10 ,10 ,10 ,10 ,10 ,10 ,10 ,10 ,10 ,1	.07 .14 .21 .28 .35 .42 .49 .56 .63 .70 .7, 70 .9, 80 .9, 10 .11, 20 .11, 20 .11, 20 .11, 40 .11, 40	.00 .191.22 .32 .38 .48 .49 .55 .66 .66 .66 .67 .77 .77 .70 .70 .70 .70 .70 .70 .70 .7	8. 8. 8. 9. 10. 11. 12. 13. 14. 15. 16. 19. 12. 13. 14. 15. 16. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19	08 16 16 16 16 16 16 16 1	.09 .17 .28 .34 .43 .51 .68 .77 .85 .85 .9.35 .0.20 .0.20 .0.20 .0.35 .6.15 .5.30 .6.15 .5.30 .6.15 .5.30 .6.15 .6.35 .6.35 .6.15 .6.35 .6	.09 .18 .27 .36 .45 .54 .63 .72 .81 .90 .9.90 10.80 11.70 12.60 13.50 14.40 115.30 16.20 17.10 18.90 19.80 20.70 22.50



Weight of Coal in Bin or Box

A solid cubic foot of anthracite coal weighs about 93 pounds. When broken for use it weighs about 54 pounds. Bituminous coal when broken up for use weighs about 50 pounds.

Rule.—Multiply the length in feet by the height in feet, and again by the breadth in feet, and this result by 54 for anthracite coal, or by 50 for bituminous coal, and the result will equal the number of pounds.

To find the number of tons, divide by 2,000.

To Find How Many Tons of Coal a Bin Will Hold

Rule.—Multiply the length, breadth and height (all in feet) together, and this product by 56 for anthracite, or by 50 for bituminous coal. Divide by 2,000 and the result will be the number of tons.

Example.—How many tons of bituminous coal will a bin hold which is 12 feet long, 10 feet wide and 6 feet high?

 $12\times10\times6=720$ (cubic feet) $\times50=36,000$ pounds. $36,000\div2,000=18$ tons.

To Find the Amount of Charcoal a Bin Will Hold

A bushel of charcoal contains 2,571 cubic inches, and a bushel of bituminous coal 2,688 cubic inches.

Rule.—Multiply the length, breadth and height (all in inches) together, and divide by the number of cubic inches in a bushel.

Example.—How many bushels of charcoal will a bin hold which is 150 inches long, 48 inches wide and 50 inches deep?

 $150 \times 48 \times 50 = 360,000$ cubic inches in bin. $360,000 \div 2,571 = 140$ bushels.

Anthracite coal, when broken for the market, weighs about 56 pounds to the cubic foot. Bituminous coal weighs about 50 pounds.

BUYING AND SELLING BY THE TON

To find the cost of any number of pounds at so much per ton.

Rule.—Remove the decimal point three places to the left, and multiply by one-half the price per ton.

Example.—What will 1799 pounds of hay cost at \$10 per ton? 1799 pounds with the point removed equals 1.799, and 1.799×5 , one-half the price per ton, is \$8.995, the answer.

GROCER'S RETAIL RULE

As many articles, such as tea, sugar, coffee, etc., are sold at a given number of pounds per dollar, the following method will show the number of pounds that can be purchased for any number of cents.

Rule.—Multiply the number of pounds to be sold for one dollar by the number of cents' worth desired.

Example.—When sugar is sold at 19 pounds for a dollar, how many pounds can be purchased for 60 cents?

Solution.—19 \times 60 = 11.40 or 11 $\frac{2}{5}$ pounds.

Grocer's Table

12 things make 1 dozen.
12 dozen make1 gross.
12 gross make
20 things make
196 pounds of flour make 1 barrel.
200 pounds of beef or pork make barrel.
135 pounds of potatoes or apples make barrel.
280 pounds of salt make
400 pounds of molasses make
200 pounds of sugar make 1 barrel.
240 pounds of lime make
100 pounds of fish make1 quintal.
100 pounds of nails make 1 keg.
50 pounds of soap make
20 pounds of raisins make box.
2 pounds of cigars make
20 pounds of soda make
40 pounds of cheese make box.
25 pounds of tobacco make
62 pounds of tea make
60 pounds of saleratus make 1 box.
25 pounds of chocolate make 1 box.
56 pounds of butter make 1 firkin.
5 pounds of spices make1 can.
1100 pounds of rice make
2150. 42 cubic inches make
231 cubic inches make

Rapid Methods for Marking Goods

Those who buy largely can best appreciate the value of a quick and rapid method for calculating the per cent of profits desired.

If you wish to calculate the per cent on a single article, the following table will be an excellent method. If you desire to sell an article at any of the following per cents, say the article costs 50 cents, and you wish to make

10 per cent, divide by 10, multiply by 11 = 55. 20 per cent, divide by 10, multiply by 12 = 60. 25 per cent, multiply by 10, divide by $8 = 62\frac{1}{2}$. 30 per cent, divide by 10, multiply by 13 = 65. $33\frac{1}{2}$ per cent, add $\frac{1}{3}$ of itself = 66.

 $33\frac{1}{3}$ per cent, divide by 3, multiply by $4 = 66\frac{2}{3}$.

50 per cent, add $\frac{1}{2}$ of itself = 75.

How to Mark Goods

In many mercantile houses it is customary to use a private mark, which is placed on the goods to denote their cost and selling price. Various devices are used. A word or phrase containing ten different letters is the most common used. These letters are used instead of figures, thus:

If the cost and selling price of an article were respectively \$165 and \$210, the mark would be:

a c t

An extra letter called a "Repeater" is used to prevent the repetition of any figure. Instead of writing 255, which according to the above key would be a p p, the repeater z or any other letter not in the key-word may be used, which would make 255 read a p z.

The following are a few of the words that can be used:

Republican. Regulation. Quick Sales. Importance. Charleston. Cumberland. Vanderbilt. Misfortune.

Instead of letters, characters similar to the following are frequently used:

WEIGHTS AND MEASURES

WEIGHTS Troy

24 grains (gr.) 1	pennyw'ht,—dwt.
20 dwts1	ounce,—oz.
3.2 grains, 1 car	rat, diamond weight

By this weight gold, silver, and jewels only are weighed. The ounce and pound in this are the same as in apothecaries' weight.

Apothecaries'

20 grains	1	scruple.
3 scruples	1	drachm.
8 drs	1	ounce.
12 ozs	1	pound.

Avoirdupois

16 drams (drs.) 1 ounce,—oz.
16 ozs1 pound,—lb.
25 lbs quarter,—qr.*
4 quarters100 weight,—cwt.
20 cwts 1 ton.

* Formerly 28 lbs. were allowed to the quarter, but the practice is now nearly out of use excepting in the coal mines in Pennsylvania, the Eastern fish markets, and the U. S. Custom House.

Grains are the same in each of the above weights.

5,760 grains, apothecaries' or troy weight. 1 lb.
7.000 grains avoirdupois weight 1 lb.

Therefore, 144 lbs. avoir. equal 175 lbs. apoth. or troy.

Of Liquids

1	gallon	oil	weighs	9.32	lbs.	avoir.
1	gallon	disti	lled wat	er. 8.	35 lb	S.

1 gallon sea water, 10.32 lbs.

1 gallon proof spirits, 9.08 lbs.

MISCELLANEOUS

IRON, LEAD ETC.

14 lbs		è							1 stone.
21½ stones. 8 pigs						¥			1 pig.
8 pigs	۰		٠	۰	•		٠	٠	1 fother.

BEEF, PORK, ETC.

	(flour)	
100 lbs.	(fish)	1 quintal

MEASURES

Dry

2	pints 1 quart,	.—at.
8	quarts 1 peck,-	−pk.
4	pecks 1 bushe	l.—bu.
36	bushels 1 chalds	ron.
1	United States standard	
	chester) bushel—18½	
	in diameter, and 8	inches

Liquid or Wine

deep—contains 2150.42 cubic inches.

4 gills 2 pints	1 quart,—qt.
4 quarts	1 gallon.—gal.
$31\frac{1}{2}$ gallons	1 barrel,—bbl.
2 barrels	1 hogshead,—hhd.
U. S. standard	
gallon	231 cubic inches.
Beer gallon	231 cubic inches.
31 beer gallons.	1 bbl.

Time

60 seconds 1 minute.

60 minutes	1 hour.
24 hours	1 day.
7 days	
4 weeks	
28, 29, 30, or \ 1 ca	landan manth
31 days.	iendar montin.
30 days	I month (in com-
puting inte	erest).
52 weeks and 1 d	lav
52 weeks and 1 c 12 calendar months	s Year.
365 days, 5 hours,	48 minutes, and
49 seconds	1 solar year.

Circular

60 seconds .	٠		1	minute.
60 minutes . 30 degrees			1	sign.
00 degrees			1	quadrant
4 quadrants	• • •	• • •	{ 1 0	circle

A convenient method of finding the difference in time between two places, is to notice their distance apart, in degrees of longitude, and allow 4 minutes to each degree, based on the following

CALCULATION

CALCULATION.	
1440 minutes 1 day	,
or revolution of the earth.	
1 revolution of the earth is	
360 degrees; therefore,	
1 dograe 1 A minutes	

MEASURES

Long

DISTANCE

3 barleycorns 1	inch,—in,
12 in 1	l foot,—ft.
3 ft 1	yard,—yd.
5½ yds	rod,—rd.
40 rds	mile

CLOTH

21 inches	1	nail.
4 nails	1	quarter
4 quarters	1	yard.

MISCELLANEOUS

3	inches.		. 1	palm.	
4	inches.		. 1	hand.	
6	inches.	,	. 1	span.	
18	inches.	,	. 1	Bible cu	hit
$\frac{21.6}{21}$	feet.		. 1	military	pace.
3	feet.		. 1	common	pace.

Square

144 sq. ins		
9 sq. ft	 1	sq. yard.
30½ sq. yds.	 1	sq. rod.
40 sq. rods	 1	rood.
4 roods		

Surveyors'

7.92 inches	1 link.
25 links	
4 rods	1 chain.
10 square chains . \ 160 square rods \	1 acre.
640 acres	1 square mile

Cubic

1728 cubic inches	
27 cubic feet	
128 cubic feet	1 cord (wood)
40 cubic feet	
	1 standard bu.
268.8 cubic in	1 standard gal.

1 cubic ft., four-fifths of a bushel.

To find the number of bushels in a bin of any dimensions find the number of cubic feet by multiplying the three dimensions of the bin in feet; deduct one-fifth. and the result is the number of bushels.

PAPER

The Sizes in Inches

Flat Writing-Paper

Flat Letter
Flat Cap
Double Flat Letter16 x 20
Flat Foolscap
Crown
Folio Post
Demy
Medium
Check Folio
Bank Folio
Double Cap
Royal
Super Royal
Imperial

Of the different sizes there are also several different weights of each size, as Demy 20, 22, 24, 26, and 28 lbs. per ream.

Stationers usually rule, cut and fold the sizes required to make the various styles of letter and note papers—a flat sheet making one, two or four sheets of letter or note paper.

Ledger Papers

Flat Cap	 	 14 x 17
Crown	 	 15 x 19
Folio		
Demy		
Medium		
Royal		
Super Royal.		
Imperial		
Elephant	 	 .23 X 28

Book Papers

The usual sizes of these, from the different American and English manufacturers, differ but little from the above, except to fill special orders.

Paper Counts

24 sheets											1 quire.
10½ quires.		i		i		ï		·		·	1 token.
20 quires		÷		٠	۰		٠				1 ream.
2 reams	٠		٠				٠		۰		1 bundle.
5 hundles											I bale.

Units of Anything

12 pieces	1 dozen.	
12 dozen	1 gross.	
12 gross	1 great gross.	
20 units	1 score.	

THE METRIC SYSTEM

Measures of Length

Metric Denominations and Values. Equivalents in Denominations in Usz.

```
Myriameter = 10,000 meters
                                           = 6.2137 miles.
                                           = 0.62.137 m. or 3,280 feet 10 in.
= 328 feet and 1 inch.
Kilometer
               =
                   1,000 meters
100 meters
Hectometer =
                                           = 393.7 inches.
= 39.37 inches.
= 3.937 inches.
Dekameter =
                       10 meters
Meter
               =
                        1 meter
Decimeter
                      .1 of a meter
              =
Centimeter =
                                           = 0.3937 inch.
= 0.0394 inch.
                       .01 of a meter
Millimeter
               _
                     .001 of a meter
```

Measures of Surface

Metric Denominations and Values. Equivalents in Denominations in Use.

```
\begin{array}{lll} {\rm Hectare} & = 10,000 \; {\rm square \; meters} = 2.471 \; {\rm acres.} \\ {\rm Are} & = & 100 \; {\rm square \; meters} = 119.6 \; {\rm square \; yards.} \\ {\rm Centare} & = & 1 \; {\rm square \; meter} = 1,550 \; {\rm square \; inches.} \end{array}
```

Measures of Capacity

NAMES.	No	Liters.	Cub	ic Measure		Dry Measure.	Wine Measure.
Kiloliter	= 1	1,000 =	1 cub:	ic meter	=	1.308 cubic yards	=264.17 galls.
Hectoliter	=	100 =	.01 cu	ibic meter	=	2 bush. 3.35 pks.	= 26.417 galls.
Decaliter	=	10 =	10 c.	decimeters	=	9.08 quarts.	= 2 6417 galls.
Liter	=	1 =	1 c.	decimeter	=	0.908 quarts.	= 1.0567 quarts
Deciliter	=	.1 =	.1 c.	decimeter	=	6.1022 cubic inch.	= 0.845 gills.
Centiliter	=	.01 =	10 c. c	centimeters	3=	0.6102 cubic inch.	= 0.338 fluid oz.
Milliliter	=	.001 =	1 c. c	centimeter	=	0.061 cubic inch.	= 0.27 fluid dr.

Weights

Metric Denominations and Values. Equivalents in Denominations in Use.

		truy or warer at ma	A- WCISID.
NAMES.	No.Grams.	imum density.	
Millier or tonneau			= 2204.6 pounds.
Quintal	= 100,000	= 1 hectoliter	= 220.46 pounds.
Myriagram	= 10,000	= 10 liters	= 22.046 pounds.
Kilogram or kilo	= 1,000	= 1 liter	= 2,2046 pounds.
Hectogram	= 100	= 1 deciliter	= 3.5274 ounces.
Dekagram	= 10	= 10 c. centimet.	= 0.3527 ounces.
Gram	= 1	= 1 c. centimet.	= 15.432 grains.
Decigram	= .1	= .1 c. centimet.	= 1.5432 grains.
Centigram	= .01	= 10 c. millimet.	= 0.1543 grain.
Milligram	= .001	= 1 c. millimet.	= 0.0154 grain.

Weight of what quan-

tity of water at may-

Avoirdupois

Weight

Table for Finding the Contents of Square Tanks

A tank five feet by five feet holds	 6 barrels.
A tank six feet by six feet holds	 8½ "
A tank seven feet by seven feet holds	
A tank eight feet by eight feet holds	
A tank nine feet by nine feet holds	
A tank ten feet by ten feet holds .	234 "

The above table is for one foot of depth only.

To find the contents of a trough, measure its depth in feet and multiply it by the contents of one foot in depth.

A Table for Circular Tanks One Foot in Depth

Five feet in diameter holds		
Six feet in diameter holds		
Seven feet in diameter holds		9 "
Eight feet in diameter holds	1	
Nine feet in diameter holds	1	.5 "
Ten feet in diameter holds	1	94 "

N. B.—To find the contents of a tank by the table, multiply the contents of one foot in depth by the number of feet deep.

To Measure Wells or Cisterns

Square the diameter in inches, multiply by the decimal .7854, and the product by the depth of the well or cistern in inches. The result will be the full capacity of the well in cubic inches. If the actual quantity of water be sought, multiply by the depth of water in inches, and in either case divide by 231 for the number of gallons.

Circular Cisterns, One Foot in Depth, Computed

DIAMETER	CONTENTS	DIAMETER	CONTENTS
IN INCHES	IN GALLONS	IN INCHES	IN GALLONS
12	5.875	18	13.218
15	9.18	20	16.32
16		21	18

For any greater depth than one foot, multiply by the number of feet and fractions of a foot. As the areas of circles, and consequently the capacities of circular cisterns of equal depth, vary as the squares of their diameters, it is unnecessary to multiply calculations. For instance, should it be required to find the contents of a circular cistern of 2 feet in diameter, say as the square of 1: to the square of 2:5.875, that is, as 1:4::5.875, and $5.875 \times 4 = 23.5 =$ the contents of such cistern. This formula will apply to any diameter; for 3 feet, multiply by 9; for 4 feet, multiply by 16, etc.; for 5, by 25.

Cisterns and Casks

To Measure the Contents of Cisterns.—To ascertain the contents of circular cisterns, multiply the square of the diameter in feet by the depth in feet, and that product by $\frac{2373}{2000}$ for the contents in hogsheads, or by $\frac{278}{2000}$ for barrels, by $\frac{47}{8}$ for the contents in gallons.

Square Cisterns.—Multiply the width in feet by the length in feet, and that by the depth in feet, and that again by $^{19}_{100}$ for hogsheads, or $^{19}_{50}$ for barrels, or 7^{40}_{100} for gallons.

Another and simpler method is to multiply together the length, width, and depth, in inches, and divide by 231, which will give the contents in gallons.

Cask Gauging.—To measure the contents of cylindrical vessels multiply the square of the diameter in inches by 34, and that by the height in inches, and point off four figures. The result will be the contents or capacity, in wine gallons and decimals of a gallon. For beer gallons multiply by 28 instead of 34. If the cask be only partially filled, multiply by the height of the liquid instead of the height of the cask, to ascertain actual contents. In ascertaining the diameter, measure the diameter at the bung and at the head, add together, and divide by 2 for the mean diameter.

TANK AND BARREL MEASUREMENT

To Find the Contents of a Round Tank

Multiply the square of the diameter in feet by the depth in feet, and multiply this result by 6, and you have the approximate contents of the tank in gallons. (For exact results multiply the product by $5\frac{7}{8}$, instead of 6.)

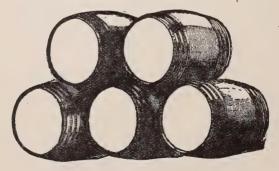
Example.—How many gallons will a tank hold 7 feet in diameter and 5 feet deep?

Solution. $-7 \times 7 \times 5 = 245$.

 $245\times6=1,470$ gallons.

Note.—If the tank is larger at the bottom than at the top, find the average diameter by measuring the middle part of the tank halfway between the top and bottom.

To Find the Capacity of Barrels



Rule.—Add the head and bung diameters in inches, and divide by two for the mean diameter. Then multiply the average diameter by itself in inches, and again by the height in inches, then multiply by 8, cut off the right-hand figure, and you have the number of cubic inches. Divide by 277½ and you have the number of gallons.

To find the bushels divide by 2150.4.

Example.—How many gallons in a barrel, whose middle or bung diameter is 20 inches, and end diameter is 16 inches, and 30 inches in height?

Solution. $-20+16 \div 2=18$ average diameter.

 $18 \times 18 \times 30 \times 8 = 7776$.

 $7776 \div 277\frac{1}{4} = 28\frac{5}{1109}$ gallons.

Note—A barrel is estimated usually at $31\frac{1}{2}$ gallons. The hogshead at 63 gallons.

To Find the Contents of a Watering-Trough

Rule.—Multiply the height in feet by the length in feet, and the product by the width in feet, and divide the result by 4, and you will have the contents in barrels of 31½ gallons each.

Example.—What are the contents of a watering-trough 10 feet long, 6 feet wide, and 4 feet deep?

Solution. $-4 \times 10 \times 6 = 240 \div 4 = 60$ barrels.

Note—For exact results multiply the length in inches by the height in inches, by the width in inches, and divide the result by 231, and you will have the contents in gallons.

Rule for Measuring Hay.

The quantity of hay in a mow or stack can only be approximately estimated by measurement.

Good timothy hay in the mow when thoroughly settled takes about 350 cu. ft. to make a ton. Partly settled or new hay takes from 400 to 500 cu. ft., while common meadow hay takes nearly twice the number of cu. ft. to a ton. Hay stacked takes probably 100 cu. ft. more than hay in the mow.

Example.—How many tons in a mow 25 ft. long 20 ft. wide and 14 ft high?

 $25 \times 20 \times 14 = 7000$ cu. ft. $7000 \div 350 = 20$ tons.

BUILDERS' TABLES

BUILDERS' ESTIMATING TABLES

Quantity of material in every four lineal feet of exterior wall in a balloon frame building, height of wall being given:

Length of Studs.	Size of Sills.	Size of Studs,Braces, etc.	Quantity of Rough Lumber.	Quantity of inch Boarding	in	Tar Paper in sup. feet.
8 10 12 14 16 18 20 22 24	6 x 6 6 x 8 6 x 10 6 x 10 8 x 10 8 x 10 8 x 12 9 x 12 10 x 12	2 x 4 Studs 4 x 4 Braces 4 x 4 Plates 1 x 6 Ribbons Studs 16 inches from centers	42 52 62 69 82 87 98 109 119	36 44 53 62 71 80 88 97 106	40 50 60 70 80 90 100 110 120	74 80 96 112 128 144 160 176 192
18 20 22 24 26 28 30	10 x 10 10 x 12 10 x 12 12 x 12 10 x 14 10 x 14 12 x 14	2 x 6 Studs 6 x 6 Braces 4 x 6 Plates 1 x 6 Ribbons Studs 16-inch centers	122 137 145 162 169 176 198	80 88 97 106 114 123 132	90 100 110 120 130 140 150	144 160 176 192 208 224 240

Amount of lumber in rafters, collar-piece and boarding, and number of shingles to four lineal feet of roof, measured from eave to eave over ridge. Rafters 16-inch centers:

Width of House, Feet.	Size of Rafters.	Size of Collar- piece.	Quantity of Lumber in Rafter and Collar- piece.	Doonding	No. of Shingles.
14 16 18	2 x 4 2 x 4 2 x 4	2 x 4 2 x 4 2 x 4	39 45 50	91 . 70 79	560 640 720
16 18 20 22 24	2 x 4 2 x 4 2 x 4	2 x 4 2 x 4 2 x 4	56 62 67 84	88 97 106	800 880 960
24 20 22 24	2 x 6 2 x 6 2 x 6	2 x 6 2 x 6 2 x 6	84 92 101	88 97 106	800 880 960
26 28 30	2 x 6 2 x 6 2 x 6	2 x 6 2 x 6 2 x 6	109 117 126	115 124 133	1040 1120 1200

Comparative Strength of Timber and Cast Iron

Table showing the transverse strength of timber and of cast iron one foot long and one inch square.

Material.	Breaking Weight, lbs.	Weight Borne with Safety, lbs.
Ash, seasoned. Chestnut, seasoned. Hickory, seasoned. White Oak, seasoned. White Pine, seasoned.	170 270 240 135	105 115 200 196 95
Yellow Pine, seasoned	150 5,781	100 4,000

BUILDERS' TABLE OF BRICK REQUIRED

(Allowing 7 Brick to Superficial Square Foot.)

Square feet		Number of Bricks required in a										
of wall	Wall	Wall	Wall	Wall	Wall	Wall						
surface.	4 inches	8 inches	12 inches			24 inches						
surface.	thick.	thick	thick.	thick.	thick.	thick.						
1	7	15	23	30	38	45						
$\begin{matrix}1\\2\\3\\4\\5\end{matrix}$	15	30	45	60	75	90						
3	23	45	68	90	113	135						
4	30	60	90	120	150	180						
5	38	75	113	150	188	*225						
6 7	45	90	135	180	225	270						
7	53	105	158	210	263	315						
8 9	60	120	180	240	300	360						
9	68	135	203	270	338	405						
10	75	150	225	300	375	450						
20	150	300	450	600	750	900						
30	225	450	675	900	1,125	1,350						
40	300	600	900	1,200	1,500	1,800						
50	375	750	1,125	1,500	1,875	2,250						
60	450	900	1.350	1,800	2,250	2,700						
70	525	1,050	1,575	2,100	2,625	3,150						
80	600	1,200	1,800	2,400	3,000	3,600						
90	675	1.350	2,025	2,700	3,375	4,050						
100	750	1,500	2,250	3,000	3,750	4,500						
200	1,500	3,000	4,500	6,000	7,500	9,000						
300	2,250	4,500	6,750	9,000	11,250	13,500						
400	3,000	6,000	9,000	12,000	15,000	18,000						
500	3,750	7,500	11,250	15,000	18,750	22,500						
600	4,500	9,000	13,500	18,000	22,500	27,000						
700	5,250	10,500	15,750	21,000	26,250	31,500						
800	6,000	12,000	18,000	24,000	30,000	36,000						
900	6,750	13,500	20,250	27,000	33,750	40,500						
1,000	7,500	15,000	22,500	30,000	37,500	45,000						

Facts for Builders

100 square feet of surface, 4 inches to weather, requires about $1{,}000$ shingles.

1,000 shingles require of shingle nails about 5 pounds.

70 yards of surface will require about 1,000 laths.

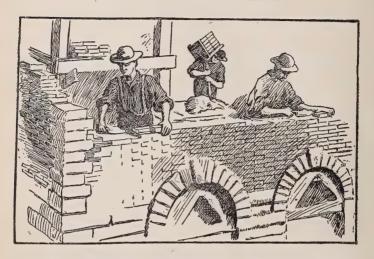
 \cdot 100 square yards of plaster will require 16 bu. sand, 8 bu. lime, 1 bu. hair.

1,000 laths will require of lath nails 11 pounds.

 $100\ \mathrm{cubic}$ feet of wall will require 1 cord stone, 3 bu. lime and 1 cubic yard of sand.

One-fifth more siding is required than surface measure, to allow for lap.

FACTS FOR BUILDERS



FACTS CONCERNING STONEWORK, BRICKWORK AND PLASTERING

Stonework

- 1. A cord of stone, three bushels of lime and a cubic yard of sand will make 100 cubic feet of wall.
 - 2. One cubic foot of stonework weighs from 130 to 175 pounds.

Brickwork

- 3. Five courses of brick will make one foot in height on a chimney.
- 4. One cubic foot of brickwork, with common mortar, weighs from 100 to 110 pounds.
 - 5. A cask of lime will make mortar sufficient for 1,000 bricks.

For Plastering

- 6. Six bushels of lime, 40 cubic feet of sand* and $1\frac{1}{2}$ bushels of hair will plaster 100 square yards with two coats of mortar.
 - *N. B. There are about 11 cubic feet in a bushel.

Common Brick in a Wall or Building

A brick is 8 inches long, 4 inches wide and 2 inches thick, and contains 64 cubic inches. Twenty-seven brick make one cubic foot of wall, without mortar, and it takes from 20 to 22 bricks, according to the amount of mortar used, to make a cubic foot of wall with mortar.

Rule.—Multiply the length of the wall in feet by the height in feet, and that by its thickness in feet, and then multiply that result by 20, and the product will be the number of bricks in the wall.

N. B.—For a wall 8 inches thick multiply the length in feet by the height in feet and that result by 15, and the product will equal the number of bricks. When doors and windows occur in the wall multiply their height, width and thickness together and deduct the amount from the solid contents of the wall before multiplying by 20 or 15, as the case may be.

Short Method of Estimating Stonework

Rule.—Multiply the length in feet by the height in feet, and that by the thickness in feet, and divide this result by 22 and the quotient will be the number of perches of stone in the wall.

N. B.—In a perch of stone there are 24% cubic feet, but 2% cubic feet are generally allowed for the mortar and filling.

How to Find the Number of Cord Stone to Build Cellar and Barn Walls

Rule.—Multiply the length, height and thickness together in feet, and divide the result by 100.

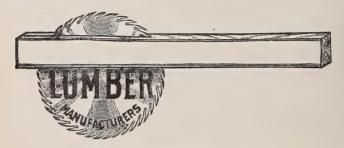
N. B.—There are 128 cubic feet in a cord, but the mortar and sand make it necessary to use but 100 cubic feet of stone.

The Number of Bricks Required for a Building

The average brick is eight inches long, four inches wide and two inches thick, or $64 \, (8 \times 4 \times 2)$ cubic inches; 1,728 cubic inches make one cubic foot, and 27 bricks make 1,728 (64×27) cubic inches. In laying bricks $\frac{1}{6}$ is allowed for mortar, or $4\frac{1}{2}$ out of every 27, leaving $22\frac{1}{2}$ actual bricks for each cubic foot. Therefore, multiply the dimensions—length, height and thickness—in feet and fraction of a foot, of the several brick walls, and the product by $22\frac{1}{2}$ and the result will be the number of bricks required. Multiply by 20 instead of $22\frac{1}{2}$ if the bricks are larger than the average above given. Allowance should be made for chimneys, projections for mantels and the like on the same basis.

Number of Perches of Stone Required for a Wall or Cellar

The perch of stone is now computed at a perch, or 16.5 feet in length by 1.5 feet in width and 1 foot in height, or 24.75 ($16.5 \times 1.5 \times 1$) cubic feet. Of this amount one-ninth, 2.75 cubic feet, is allowed for mortar and filling. Multiply the three dimensions of the wall or walls in feet—width, height and thickness—and divide by 22 (24.75 - 2.75) if the needed quantity of stone is the subject of inquiry, or by 24.75 if it be sought to ascertain the amount of masonry in the wall or cellar.



BUYING AND SELLING LUMBER

To find the cost of any number of feet of lumber at so much per thousand feet.

Rule.—Remove the decimal point three places to the left in any number of feet, and multiply by the price of one thousand feet.

Example.—What will 859 feet of lumber cost at \$12 per thousand feet? Remove the point three places to the left in 859=.859, and $.859\times$12=10.308 , the answer.

The Number of Cubic Feet in a Round Log of Uniform Diameter

Square the diameter, in inches, multiply by .7854, and multiply this product by the length in feet, divide by 144, and the quotient is the number of cubic feet.

Estimate of the Number of Cubic Feet in the Trunk of a Standing Tree

Find the circumference in inches, divide by 3.1416, square the quotient, multiply by the length in feet, divide by 144; deduct about one-tenth for thickness of bark, and the result will be, approximately, the number of cubic feet.

LUMBER 403

FACTS FOR LUMBERMEN



The Number of Feet, Board Measure, in a Log of Unequal Diameters

Square the smallest diameter in inches, multiply by .7854, and the product by the length of the log in feet, divide by 12, and the quotient will be the number of feet of board measure, approximately.

The Number of Feet, Board Measure, in a Lot of Boards, Planks, Flooring, Scantling, Joists, Sills or Beams

The foot of board measure is a superficial or square foot, one inch thick. Multiply the product of the width and thickness of each board, plank or other article, in inches, by the length in feet and fractions of a foot, divide by 12, and the quotient will be the number of feet of board measure. In flooring, allowance must be made for rabbeting, the proportion varying with the depth of the groove and the width of the boards.

The Number of Square Yards in a Floor or Wall

Multiply the length and width of the floor, or height and width of the wall, in feet and fractions of a foot, divide by nine, and the quotient is the number of square yards.

BOARD AND PLANK MEASUREMENT-AT SIGHT

This Table gives the Sq. Ft. and In. in Board from 6 to 25 in, wid, and from 8 to 36 ft. long
If a board be longer than 36 ft., unite two numbers. Thus, if a Board is 40 ft long and
16 in. wide, add 30 and 10 and you have 53 ft. 4 in. For 2-in Plank double the product.

Feet Long.	6 in W	7 in W	8 in W	9 in W	10inW	llinW	12inW	13 in W	14 in W	lő in W
F.S.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in	ft. in.	ft in	ft. in.	ft. in	ft. in.
8	4 0 4 6	4 8 5 3	5 4 6 0	60	6 8 7 6 8 4 9 2	7 4 9 3 9 2	80	8 8 9 9	9 4 10 6	10 0 11 3
10	5 0	5 10	68	76	7 6 8 4 9 2	9 2	10 0	10 10	11 8	12 6
iĭ	5.6	6 5	7 4	8 3	9 2	10 1	îĭŏ	ii ii	12 10	12 9
12	6.0	7 0	8.0	9 0	10 0	11 0	12 0	13 0	14 0	15 0
13	6 6	7 7	8.8	99	10 10	11 11	13 0	14 1	15 2	16 3
14	7 0	8 2 8 9	9 4	10 6	11 8	12 10	14 0	15 2	16 4	17 6
15 16	7 6 8 0	8 9 9	10 0 10 8	11 3 12 0	12 6 13 4	13 9 14 8	15 0 16 0	16 3 17 4	17 6 18 8	18 9 20 0
17	8 6	9 11	11 4	12 9	14 2	15 7	17 0	18 5	19 10	21 3
18	9 0	10 6	12 0	13 6	15 0	16 6	18 0	19 6	21 0	22 6
19	9 6	11 1	12 8	14 3	15 10	17 5	19 0	20 7	22 2	23 9
20	10 0	11 8	13 4	15 0	16 8	18 4 19 3 20 2	20 0	21 8	23 4	25 0
21 22	10 6 11 0	12 3 12 10	14 0 14 8	15 9 16 6	17 6 18 4	19 3 20 2	21 0 22 0	22 9 23 10	24 6 25 8	26 8 27 6
23	11 6	13 5	15 4	17 3	19 2	21 1	23 0	24 11	26 10	28 9
24	12 0	14 0	16 0	18 0	20 0	22 0	24 0	26 0	28 0	30 0
25	12 6	14 7	16 8	18 9	20 10	22 11	25 0	27 1	29 2	81 3
26	13 0	15 2	17 4	19 6	21 8	23 10	26 0	28 2	30 4	32 6
27	13 6	15 9	18 0	20 3	22 6 23 4	24 9	27 0	29 3	31 6 32 8	33 9
28 29	14 0 14 6	16 4 16 11	18 8 19 4	21 0	23 4 24 2	25 8 26 7	28 0 29 0	30 4	33 10	35 0 36 3
30	15 0	17 6	20 0	22 6	25 0	27 6	30 0	32 6	35 0	37 6
31	15 6	18 1	20 8	23 3	25 10	28 5	31 0	33 7	36 2	38 9
32	16 0	18 8	21 4	24 ()	26 8	29 4	32 0	34 8	37 4	40 0
33	16 6	19 3	22 0	24 9	27 6	30 3	33 0	35 9	38 6	41 3
34 35	17 0 17 6	19 10 20 5	22 8 23 4	25 6 26 3	28 4 29 2	31 2 32 1	34 0 35 0	36 10 37 11	39 8 40 10	42 6 43 9
36	18 0	21 0	24 0	27 0	30 0	33 0	36 0	39 0	42 0	45 0

ROARD	TARLE	MEASI	HREMENT-CONTINUED

	10' 377	2.77 337	101-317	110:- 317	100: 117	1011-517	100 to 317	.00 2- 377	O 12 377	OF 1- TIP
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& € I										
E 9	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.
	10. 224.	20. 212.	20.2	20. 22.				20. 2	20. 24.	20. 22.
-				10 0		74.0			70.0	
8	10 8	11 4	12 0	12 8	13 4	14 0	14 8	15 4	16 0	16 8
9	12 0	12 9	13 6	14 3	15 0	15 9	16 6	17 3	18 0	18 9
10	13 4	14 2	15 0	15 10	16 8	17 6	18 4	19 2	20 0	20 10
11	14 8	15 7	16 6	17 5	18 4	19 3	20 2	21 1	22 0	22 11
12	16 0	17 0	18 0	19 0	200	21 0	22 0	23 0	24 0	25 0
13	17 4	18 5	19 6	20 7	21 8	22 9	23 10	24 11	26 0	27 1
14	18 8	19 10	21 0	22 2	23 4	24 6	25 8	26 10	28 0	29 2
15	20 0	21 3	22 6	23 9	25 0	26 3	27 6	28 9	30 0	31 3
16	21 4	22 8	24 0	25 4	26 8	28 0	29 4	30 8	32 0	33 4
17	22 8	24 1	25 6	26 11	28 4	29 9	31 2	32 7	34 0	35 5
	24 Ŏ	25 6	27 0	28 6	30 0	31 6	33 0	34 6	36 0	37 6
18										91 0
19	25 4	26 11	28 6	30 1	31 8	33 3	34 10	36 5	38 0	39 7
20	26 8	28 4	30 0	31 8	33 4	35 0	36 8	38 4	40 0	41 8
21	28 0	29 9	31 6	33 3	35 0	36 9	38 6	40 3	42 0	43 9
22	29 4	31 2	33 0	34 10	86 8	38 6	40 4	42 2	44 0	45 10
02										
23	30 8	32 7	34 6	36 5	38 4					47 11
24	32 0	34 0	36 0	38 0	40 0	42 0	44 0	46 0	48 0	50 0
25	33 4	35 5	37 6	39 7	41 8	43 9	45 10	47 11	50 0	52 1
26	34 8	36 10	39 0	41 2	43 4	45 6	47 8	49 10	52 0	54 2
				42 9		47 3	49 6	51 9	54 0	56 3
27	36 0	38 3								
28	37 4	39 8	42 0	44 4	46 8	49 0	51 4	53 8	56 0	58 4
29	38 8	41 1	43 6	45 11	48 4	50 9	53 2	55 7	58 0	60 5
30	40 0	42 6	45 0	47 6	50 0	51 6	55 0	57 6	60 0	62 6
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LUMBER 405

SCANTLING REDUCED TO ONE INCH BOARD MEASURE. SCANTLING AND TIMBER MEASURE

REDUCED TO ONE INCH BOARD MEASURE.

EXPLANATION.—To ascertain the number of Feet of Scantling or Timber, say 18 Feet Long and 2 by 3 Inches. Find 2 by 3 in the top columns, and 18 in the left hand column, and under 2 by 3 and against 18 is 9 feet.

If the Scantling is longer than contained in the Table, add two lengths together. If shorter, take part off some length.

THICKNESS AND WIDTH IN INCHES.

2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 | 2.9 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 | 4.4

67 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 30 34	8. 8.4 10. 11.4	9.6 10.10.6 11.6 12.6 15.17.	9.4 10.8 11.4 12. 12.8 13.4 14. 14.8 15.4 16. 16.8 20. 22.8	12. 6 13. 4 14. 2 15. 15. 10 16. 8 17. 6 18. 4 19. 2 20. 20. 10 25. 28. 4	8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24.	10. 6 11. 8 12. 10 14. 15. 2 16. 4 17. 6 19. 10 21. 22. 2 23. 4 25. 8 26. 10 28. 29. 2 35. 39. 3	10.8 112. 13.1 14.8 16. 16. 16. 17. 18.8 18.8 19. 19. 19. 19. 19. 19. 19. 19.	13.6 15. 16.6 18. 19.6 8 21. 22.6 4 24. 8 25.6 27. 4 28.6 8 30. 31.6 33.6 34.6 37.6 45.	10.6 11.3 12. 12.9 13.6 14.3 15. 15.9 16.6 17.3 18.	8. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 30. 34.	11.3 12.6 13.9 15. 16.3 17.6 18.9 20. 21.3 22.6 23.9 25. 26.3 27.6 30. 31.3 37.6 42.6	12. 13.6 15. 16.6 18. 19.6 21. 22.6 24. 25.6 30. 31.6 33. 34.6 36. 37.6	12.3 14. 15.5 17.6 19.3 21. 22.5 24.6 28. 29.5 33.3 35. 36.9 38.6 40.3 44.3 55.6 59.6	16. 18. 18. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19	15.9 18. 20.3 22.6 24.9 27. 29.3 31.6 38.3 40.6 42.9 45. 47.3 49.6	9.4 10. 12. 13.4 14.8 16. 17.4 20.0 21.4 22.8 24. 24.4 26.8 28. 30.8 32. 33.4 40. 45.4
et.	10 13.4 20. 26.8 33. 4 40. 46. 8 53.4 60. 30.0 40. 50. 60. 70. 80. 90. 53.															
-	5.4 4	6 4	7 4	.8 4	.9	$5.5 \mid 5$	5.6	5.7	5.8	5.9	6.0	6 6	.7	6.8	6.9	6.10
- 6				- 1		-	-	4= 0		-		-1-		-		od.
	10. 12 11.8 14	, 16	.4 1	8.8	21. 1	4. 7	17.6		20. 23.4		3 21	. 2	1	24. 28.	27. 31.6	30. 35.
8 9	11.8 14 13.4 16 15. 18	. 16 i. 18 i. 21	.8 2	8.8 1.4 4.	21. 1 24. 1 27. 1	4. 7 6. 8 8. 9	17.6 20. 22.6	20. 5 23. 4 26. 3	23.4 26.8 30.	26. 30. 33.	$\begin{array}{c c} 3 & 21 \\ 24 \\ 9 & 27 \end{array}$	2 2 3	4.6 8. 1.6	28. 32. 36.	31.6 36, 40,6	35. 40. 45.
8 9 10 11	11.8 14 13.4 16 15. 18 16.8 20 18.4 22	i. 16 i. 18 i. 21 i. 23 i. 25	.4 1 .8 2 .4 2 .8 2	8.8 1.4 4. 6.8 9.4	21. 1 24. 1 27. 1 30. 2 33. 2	4. 7 6. 8 8. 9 20.10 22.11	17.6 20. 22.6 25. 27.6	20. 5 23. 4 26. 3 29. 2 32. 1	23.4 26.8 30. 33.4 36.8	26. 30. 33. 37. 41.	3 21 24 9 27 6 30 3 33	2 2 3 3 3 3 3	4.6 8. 1.6 5. 8.6	28. 32. 36. 40. 44.	31.6 36. 40.6 45. 49.6	35. 40. 45. 50. 55.
8 9 10 11 12	$egin{array}{cccccccccccccccccccccccccccccccccccc$	16 18 18 19 10 10 10 10 10 10 10 10 10 10	.4 1 .8 2 .4 2 .8 2	8.8 1.4 4. 6.8 9.4 2.	21. 1 24. 1 27. 1 30. 2 33. 2 36. 2	4. 7 6. 8 8. 9 20.10 22.11	17.6 20. 22.6 25. 27.6 30.	20. 5 23. 4 26. 3 29. 2 32. 1	23.4 26.8 30. 33.4 36.8 40.	26. 30. 33. 37. 41. 45.	3 21 24 9 27 6 30 3 33 36	2 2 3 3 3 4	4.6 8. 1.6 5. 8.6	28. 32. 36. 40.	31.6 36. 40.6 45.	35. 40. 45. 50.
8 9 10 11 12 13 14	11.8 14 13.4 16 15. 18 16.8 20 18.4 22 20. 24 21.8 26 23.4 28	1. 16 1. 18 1. 21 1. 23 1. 25 1. 28 1. 30 1. 32	.4 1 .8 2 .4 2 .4 3 .4 3 .8 3	8.8 1.4 4. 6.8 9.4 2. 4.8 7.4	21. 1 24. 1 27. 1 30. 2 33. 2 36. 2 39. 2 42. 2	4. 7 6. 8 8. 9 20.10 22.11 25. 27. 1	17.6 20. 22.6 25. 27.6 30. 32.6 35.	20. 5 23. 4 26. 3 29. 2 32. 1 35. 37.11 40.10	23.4 26.8 30. 33.4 36.8 40. 43.4 46.8	26. 30. 33. 37. 41. 45. 48. 52.	3 21 24 9 27 6 30 3 33 36 9 39 6 42	24 3. 3. 3. 3. 4. 4. 4.	4.6 8. 1.6 5. 8.6 2. 5.6 9.	28. 32. 36. 40. 44. 48. 52. 56.	31.6 36. 40.6 45. 49.6 54. 58.6 63.	35. 40. 45. 50. 55. 60. 65. 70.
8 9 10 11 12 13 14 15	11.8 14 13.4 16 15. 18 46.8 20 18.4 22 20. 24 21.8 26 23.4 28 25. 30 26.8 32	i. 16 i. 18 i. 21 i. 23 i. 25 i. 28 i. 30 i. 32 i. 35 i. 37 i. 3	.4 1 .8 2 .4 2 .8 2 .4 3 .4 3 .4 3 .4 4 .4 4	8.8 1.4 4. 6.8 9.4 2. 4.8 7.4 0. 2.8	21. 1 24. 1 27. 1 30. 2 33. 2 36. 2 39. 2 42. 2 45. 3	4. 7 6. 8 8. 9 20.10 22.11 25. 1 29. 2 11. 3 13. 4	17.6 20. 22.6 25. 27.6 30. 32.6 35. 37.6	20. 5 23. 4 26. 3 29. 2 32. 1 35. 37.11 40.10 43. 9 46. 8	23.4 26.8 30. 33.4 36.8 40. 43.4 46.8 50. 53.4	26. 30. 33. 47. 45. 48. 56. 60.	3 21 24 9 27 6 30 3 33 36 9 39 6 42 3 45 48	2: 3: 3: 3: 3: 4: 4: 4: 5: 5: 5:	4.6 8. 1.6 5. 8.6 2. 5.6 9. 2.6 6.	28. 32. 36. 40. 44. 48. 52. 56. 60.	31.6 36. 40.6 45. 49.6 54. 58.6 63. 67.6 72.	35. 40. 45. 50. 55. 60. 65. 70. 75. 80.
8 9 10 11 12 13 14 15 16 17 18	111.8 14 113.4 16 115. 18 16.8 20 118.4 22 20. 24 21.8 26 23.4 28 25. 30 26.8 32 228.4 34 330. 36	5. 165, 186, 186, 186, 186, 186, 210, 236, 226, 236, 320, 357, 356, 426,	4 1 .8 2 .4 2 .8 3 .4 3 .8 4 .8 4 .8 4 .8 4	8.8 11.4 14. 16.8 19.4 12. 14.8 17.4 10. 2.8 15.4 18.	21. 1 24. 4 27. 1 30. 2 33. 2 33. 2 36. 2 39. 2 42. 2 45. 3 51. 3 54. 3	44. 7 16. 8 18. 9 20.10 22.11 25. 77. 1 29. 2 11. 3 13. 4 15. 5	17.6 20. 22.6 25. 27.6 30. 32.6 35. 37.6 40. 42.6	20. 5 23. 4 26. 3 29. 2 32. 1 35. 37.11 40.10 43. 9 46. 8 49. 7 52. 6	23.4 26.8 30. 33.4 36.8 40. 43.4 46.8 50. 53.4 56.8	26. 3 30. 33. 37. 3 41. 45. 48. 56. 60. 63. 67.	3 21 24 9 27 6 30 3 33 36 9 39 6 42 45 48 9 51 6 54	2. 2. 3. 3. 3. 3. 4. 4. 4. 4. 4. 5. 5. 5. 5. 6. 6.	4.6 8. 1.6 5. 8.6 2. 5.6 9. 2.6 6. 9.6 3.	28. 32. 36. 40. 44. 52. 56. 60. 64. 68. 72.	31.6 36. 40.6 45. 49.6 54. 58.6 67.6 72. 76.6 81.	35. 40. 45. 50. 55. 60. 65. 70. 75. 80. 85.
8 9 10 11 12 13 14 15 16 17 18	11.8 14 13.4 16 15. 18 46.8 20 18.4 22 20. 24 21.8 26 23.4 28 25. 30 26.8 32 28.4 34	. 166, 188, 211, 232, 253, 284, 286, 300, 355, 429, 440, 460, 460, 460, 460, 460, 460, 460	4 1 8 2 2 2 4 2 8 3 4 4 4 4 4 4 4 4 5 8 5	8.8 11.4 14. 16.8 19.4 12. 14.8 17.4 10. 2.8 15.4 18.	21. 1 24. 4 27. 1 30. 2 33. 2 36. 2 39. 2 42. 2 45. 3 51. 3 57. 3	14. 7 16. 8 18. 9 20.10 22.11 25. 27. 1 29. 2 11. 3 13. 4 15. 5 17. 6 19. 7	17.6 20. 22.6 25. 27.6 30. 32.6 35. 37.6 40. 42.6 45.	20. 5 23. 4 26. 3 29. 2 32. 1 35. 37.11 40.10 43. 9 46. 8 49. 7 52. 6 55. 5 58, 4	23.4 26.8 30. 33.4 36.8 40. 43.4 46.8 50. 53.4 56.8	26. 3 30. 33. 45. 45. 45. 56. 60. 63. 67.	3 21 24 9 27 6 30 3 33 36 9 39 6 42 45 48 9 51 6 54	2: 3: 3: 3: 4: 4: 4: 4: 5: 5: 6: 6: 6:	4.6 8. 1.6 5. 8.6 2. 5.6 9.6 3. 6.6	28. 32. 36. 40. 44. 52. 56. 64. 68.	31.6 36. 40.6 45. 49.6 54. 58.6 67.6 72. 76.6 81. 85.6	35. 40. 45. 50. 55. 60. 65. 70. 75. 80.
8 9 10 11 12 13 14 15 16 17 18 20 21	111.8 1413.4 1613.4 165. 1846.8 2018.4 2220. 24220. 24225. 30225. 303226.8 3228.4 34330. 3631.8 3833.4 4035. 4228.8 4235.	1. 166 1. 188 1. 188	4 1 8 2 2 2 4 2 8 3 4 3 4 4 4 4 4 5 5 5 6 7	8.8 1.4 4. 6.8 9.4 2. 4.8 7.4 0. 2.8 5.4 8. 6.8 6.8	21. 1 24. 1 27. 1 30. 2 33. 2 36. 2 39. 2 42. 2 45. 3 51. 3 57. 3 60. 4 63. 4	44. 7 16. 8 18. 9 20.10 22.11 25. 7 17. 1 19. 2 11. 3 13. 4 15. 5 16. 8 17. 1 18. 9 19. 2 11. 8 19. 10 19. 10	17.6 20. 22.6 25. 27.6 30. 32.6 35. 37.6 40. 42.6 45. 47.6 50.	20. 5 23. 4 26. 3 29. 2 32. 1 35. 37.11 40.10 43. 9 46. 8 49. 7 52. 6 55. 5 58. 4 61. 3	23.4 26.8 30. 33.4 36.8 40. 43.4 46.8 50. 53.4 66.8 70.	26. 30. 33. 37. 45. 45. 46. 56. 60. 63. 67. 71. 75. 78.	3 21 24 9 27 6 30 3 33 36 9 39 6 42 3 45 48 9 51 6 54 3 57 9 63	2: 3: 3: 3: 3: 4: 4: 4: 4: 5: 6: 6: 6: 7: 7:	4.6 8. 1.6 5. 8.6 2. 5.6 9.6 3.6 0. 3.6	28. 32. 36. 40. 44. 52. 56. 60. 64. 68. 72. 76. 80. 84.	31.6 36. 40.6 45. 49.6 54. 58.6 67.6 72. 76.6 81. 85.6 90.	35. 40. 45. 50. 55. 60. 65. 70. 75. 80. 85. 90. 95. 100.
8 9 10 11 12 13 14 15 16 17 18 20 21 22 23	111.8 1413.4 1613.4 165. 18.4 2220. 2422. 223.4 226. 3226.8 3226.8 3226.8 333.4 4633.4 4638.	. 166 188 211 232 252 253 364 365 375 375 426 447 467 46	4 1 8 2 2 2 8 3 4 3 8 4 4 4 5 5 6 8 6	8.8 1.4 44. 66.8 9.4 22. 44.8 7.4 4.0. 2.8 4.5.4 80.8 13.4	21. 1 24. 4 27. 1 30. 2 33. 2 33. 2 36. 2 39. 2 442. 2 445. 3 448. 3 57. 3 60. 4 63. 4 66. 4 69. 4	44. 7 16. 8 18. 9 19. 10 19. 10 19. 2 11. 3 13. 4 15. 5 17. 6 19. 7 11. 8 13. 10 14. 10 15. 10 16. 10 17. 11	17.6 20. 22.6 25. 27.6 30. 32.6 35. 37.6 40. 42.6 45. 47.6 50. 552.6	20. 5 23. 4 26. 3 29. 2 32. 1 35. 1 40.10 43. 9 46. 8 49. 7 55. 6 55. 5 58. 4 64. 2 67. 1	23.4 26.8 30. 33.4 36.8 40. 43.4 46.8 50. 63.4 66.8 70. 73.4 76.8	26. 30. 33. 37. 45. 45. 48. 56. 60. 63. 67. 771. 771. 8 75. 78. 82. 86. 86.	3 21 24 9 27 6 30 3 33 36 9 39 6 42 3 45 48 9 51 6 54 3 57 60 9 63 6 66 3 69	2 2 3 3 3 3 3 3 4 4 4 4 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6	4.6 8. 11.6 5. 8.6 22. 5.6 9.6 6.6 9.6 3.6 7.	28. 32. 36. 40. 44. 52. 56. 60. 64. 68. 72. 76. 88. 92.	31.6 36. 40.6 45. 49.6 58.6 67.6 72. 76.6 81. 85.6 99. 103.6	35. 40. 45. 50. 55. 60. 65. 70. 75. 80. 85. 90. 100. 110.
8 9 10 11 12 13 14 15 16 17 18 20 21 22 23 24	111.8 1413.4 1613.4 165. 184.6 20. 2420. 2420. 2420. 2420. 2420. 2420. 2420. 3630.	. 166, 188, 211, 230, 230, 250, 350, 350, 422, 499, 400, 469, 568, 560, 588	.4 1.8 22 22 .4 22 .8 3 3 4 4 4 4 4 4 5 5 5 5 6 4 6 6 6 6 6 6 6 6	8.8 1.4 4.8 16.8 19.4 2.8 4.8 17.4 4.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10	21. 1 24. 1 27. 1 30. 2 33. 2 33. 2 36. 2 442. 2 445. 3 56. 3 57. 3 66. 4 66. 4 66. 4 66. 4 72. 5	44. 7 16. 8 18. 9 20.10 22.11 25. 1 27. 1 29. 2 11. 3 33. 4 55. 5 57. 6 99. 7 11. 8 13. 9 14. 8 15. 1 16. 8 17. 1 17. 1 18. 8 19. 1 19. 2 19. 1 19. 1 19	17.6 20. 22.6 25. 27.6 30. 32.6 35. 37.6 40. 42.6 47.6 50. 655. 660.	20. 5 23. 4 26. 3 29. 2 32. 1 35. 3 37. 11 40. 10 46. 8 49. 7 52. 6 65. 5 58. 4 61. 3 64. 2 67. 1 72. 11	23.4 26.8 30. 33.4 46.8 50. 53.4 66.8 70. 73.4 76.8 80. 83.4	26. 30. 33. 37. 45. 45. 45. 60. 63. 67. 71. 75. 78. 82. 890. 93.	3 21 24 9 27 6 30 3 33 36 9 39 6 42 45 48 9 51 6 54 3 57 60 6 63 6 63 6 69 72 9 75	2 2 2 3 3 3 3 4 4 4 4 4 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6	4.6 8. 11.6 5. 8.6 22. 5.6 9.6 6.6 9.6 3.6 7.	28. 32. 36. 40. 44. 48. 52. 56. 60. 64. 68. 72. 76. 88. 92.	31.6 36. 40.6 45. 49.6 58.6 67.6 72. 76.6 81. 85.6 99. 103.6	35. 40. 45. 50. 55. 60. 65. 70. 75. 80. 85. 90. 95. 100. 1115.
8 9 10 11 12 13 14 15 16 17 18 9 20 22 23 24 25 30	111.8 1413.4 1613.4 1615. 184 16.8 2018.4 2220. 2421.8 2623.4 2825. 30225. 3033.4 3633.4 40336. 42436. 4240. 48	166 188 211 22 25 25 25 25 25 25 25 25 25 25 25 25	.4 1.8 22 22 .4 22 .8 3 3 4 4 4 4 4 4 4 5 5 5 5 6 4 6 6 6 6 6 6 6	8.8 11.4 14.8 16.8 19.4 12.8 17.4 17.4 17.4 18.8 18.8 18.8 18.8 18.8 18.8 18.8 18	21. 1 24. 4 27. 1 30. 2 33. 2 36. 2 36. 2 442. 2 445. 3 554. 3 557. 3 66. 4 66. 4 66. 4 66. 4 66. 4	44. 7 16. 8 18. 9 20. 10 22. 11 25. 1 27. 1 29. 2 31. 3 4. 55. 5 77. 6 6. 9 19. 7 19. 8 19. 7 19. 1 19. 1	117.6 220. 222.6 225. 330. 332.6 335. 6 440. 442.6 447.6 6 6 6 6 7 7 7 8	20. 5 23. 4 26. 3 29. 2 32. 1 35. 3 37. 11 40. 10 46. 8 49. 7 52. 6 65. 5 58. 4 61. 3 64. 2 67. 1 72. 11	23.4 26.8 30. 33.4 46.8 40. 43.4 46.8 50. 63.4 66.8 70. 73.4 76.8 80. 83.4	26. 30. 33. 37. 45. 45. 45. 56. 60. 63. 67. 71. 82. 82. 82. 82. 83. 84. 84. 85. 86. 86. 86. 86. 86. 86. 86. 86. 86. 86	3 21 24 9 27 6 30 3 33 36 9 42 45 48 9 51 6 54 3 57 60 9 63 66 66 3 69 67 72 9 75 60 9 72 9 75 9 75	2 2 2 3 3 3 3 3 3 3 4 4 4 4 4 4 5 5 5 6 6 6 6 6 6 6 6 6 6 6	4.6 8.6 11.6 5.6 8.6 22.6 6.6 9.6 33.6 7.0.6 44.7.6 11.6	28. 32. 36. 40. 44. 48. 52. 56. 60. 64. 68. 72. 76. 88. 92. 96. 00.	31.6 36. 40.6 45. 58.6 63. 67.6 72. 76.6 85.6 99. 103.6 108. 112.6 135.	35. 40. 45. 50. 55. 60. 65. 70. 75. 80. 85. 90. 95. 100. 1115.

THICKNESS	AND	WIDTH	IN	INCHES.
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Feet,						300 211							
F	6.11	6.1	2 7.	7 7.		_	7.11	7.12	8.8	8.9	8.10	8.11	8.12
10 11 12 13 14 15 16 17 18 19 20 21 22 23	33. 38.6 44. 49.6 55. 60.6 66. 71.6 82.6 88. 99. 104.6 115.6 121. 126.6	36 42 48 54 60 60 66 72 78 84 90 96 102 108 114 112 126 132	. 24. . 28. . 32. . 36. . 40. . 49. . 53. . 57. . 61. . 64. . 69. . 73, . 77. . 81. . 85. . 89. . 93.	6 28 7 32 8 37 9 42 10 46 11 51 1 60 2 65 3 70 4 74 5 79 6 84 7 88 8 9 98 10 102	31. 31. 32. 34. 34. 34. 34. 34. 34. 34. 34. 34. 34	6 35. 9 40.10 46. 8 52. 6 5 58. 4 70. 75. 10 6 87. 10 6 87. 10 6 10. 10 116. 8 8 122. 6 8 122. 6 8 128. 8	38. 6 0 41.11 8 51. 4 6 57. 9 4 64. 2 2 70. 7 77. 0 83. 5 8 89.10 6 96. 3 4 102. 8 2 109. 1 115. 6 0 121.11 8 128. 4 9 144. 9	42. 49. 56. 63. 70. 77. 84. 91. 98. 105. 112. 119. 126. 133. 140. 147. 154.	32. 37.4 42.8 48. 53.4 58.8 64. 74.8 80. 85.4 90.8 1 101.4 1 106.8 1 1112. 1 1117.4 1 1122.8 1	36. 42. 48. 54. 60. 66. 72. 78. 84. 90. 96. 02. 08. 14. 20. 26. 32.	40. 46.8 53.4 60. 66.8 73.4 80. 86.8 93.4 100. 126.8 133.4 140. 146.8 153.4 160.	44. 51.4 58.8 66. 73.4 80.8 88. 95.4 102.8 117.4 124.8 132. 139.4 146.8 154. 161.4	48, 56, 64, 72, 80, 88, 96, 104, 112, 120, 128, 136, 144, 152, 160, 168, 176,
H.C.	9.9	9.10	9.11	9.12	10.10	10.11	10.1	2 11.1	1 11.	12 1	2.12	12.13	12.14
16 17 18 19 20 21 22 23	114.9 121.6 128.3 135. 141.9 148.6 155.3	105. 112.6 120. 127.6 135. 142.6 150. 157.6 165. 172.6	132. 140.3 148.6 156.9 165. 173.3 181.6 189.9	108. 117. 126. 135. 144. 153. 162. 171. 180. 189.	50.0 58.4 66.8 75. 83.4 91.8 100. 108.4 116.8 125. 133.4 141.8 150. 158.4 166.8 175. 183.4 191.9 200.	73. 86. 91. 100.1 110. 119. 128. 137. 146. 155.1 165. 174. 183.	0 110. 120. 130. 140. 6 150. 8 160. 170. 180. 191. 4 290. 6 210. 8 220:	60. 70. 80. 99. 100. 121. 131. 141. 151. 161. 171. 181. 191. 201. 221. 231. 242.	7 7 7 8 8 8 9 9 9 9 10 11 12 12 15 3 16 4 17 7 20 9 8 22 9 23 10 242	7. 8. 9. 0. 1. 2. 3. 4. 5. 6. 7. 8. 9. 1. 1. 2. 3. 4. 1. 2. 3. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	72. 84. 96. 108. 120. 132. 144. 156. 168. 1.80 192. 204. 216. 228. 240. 252. 264. 188.	78. 91. 104. 117. 130. 143. 156. 169. 182. 195. 221. 234. 247. 260. 273. 286. 299. 312.	84. 98. 112. 126. 140. 154. 168. 210. 224. 238. 252. 266. 280. 308. 322. 336.
F4	12.15	12.1	6 13	.13	13.14	13.15	13.16	14.14	14.1	5 14	.16	5.15	15.16
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	90. 105. 135. 135. 150. 165. 195. 210. 225. 240. 255. 270. 385. 300. 315. 330. 345.	96 112 128 144 160 176 192 224 240 256 272 288 303 352 368 384	2. 14. 11. 11. 11. 11. 11. 11. 11. 11. 11	33. 6 38. 7 12. 8 26. 9 10.10 54.11 59. 1 37. 2 11. 3 25. 4 39. 5 13. 6 57. 7 71. 8 35. 9 49.10 13.11 38.	91, 106, 2 121, 4 136, 6 151, 8 166,10 182, 197, 2 212, 4 227, 6 242, 8 257,10 273, 288, 2 303, 4 318, 6 333, 8 318,10 364,	97.6 113.9 130. 146.3 162.6 178.9 195. 211.3 227.6 243.9 260. 276.3 292.6 308.9 325. 341.3 357.6 373.9 390.	104. 121.3 138.8 156. 173.4 190.8 208. 225.4 242.8 260. 277.4 294.8 312. 329.4 346.8 364. 381.4 398.8	98. 114.4 130.8 147. 163.4 179.8 196. 212.4 228.8 245. 261.4 277.8 290. 310.4 326.8 343. 359.4 375.8	192.6 210, 227.6 245, 262.6 280.	144 166 188 200 222 244 266 288 299 311 333 357 37 39 41	30.3 9.4 88. 66.8 55.4 44. 98.8 7.4 64.8 3.4 9.4	112.6 131.3 150. 168.9 187.6 206.3 225. 243.9 262.6 281.3 300. 337.6 356.3 375. 393.9 412.6 431.3	120. 140. 160. 180. 220. 220. 240. 260. 280. 300. 320. 340. 360. 380. 400. 440. 440. 480.

LUMBER

407

LOGS REDUCED TO RUNNING BOARD MEASURE. LOGS REDUCED TO ONE INCH BOARD MEASURE.

If the log is longer than is contained in the table, take any two lengths. The first column on the left gives the length of the Log in feet. The figures under D denote the diameters of the Logs in inches. Fractional

figures under D denote the diameters of the Logs in inches. Fractional parts of inches are not given.

The diameter of timber is usually taken 20 feet from the butt, All Logs short of 20 feet, take the diameter at the top, or small end.

To find the number of feet of boards which a Log will produce when sawed, take the length of feet in the first column on the left hand, and the diameter at the top of the page in inches.

Suppose a Log 12 feet long and 24 inches in diameter. In the left hand column is the length, and opposite 12 under 24 is 300, the number of feet of boards in a Log of that length and diameter.

			3 200		4100 1								
at .1	D.	D. 1	D.	D.	D.	D.	D.	D.	D.	D.	D.	D.	D.
Lng. Ft.	12	13	14	15	16	17	18	19	20	21	22	23	24
_													
10	54	66	76	93	104	170	137	154 169	179	194	210	237	256
11	59	72	83	102	114	131	151	169	196 213	213	231	261	270
12	64	78	90	111	124	143	164	184	213	232	252	285	300
13	69	84	97	120	134	154	177	199	231	251 270	273 293	308	327
14 15	74 79	90 96	104 111	129 138	144 154	166 177	191 204	214 229	249 266	289	314	332 355	350 376
16	84	102	118	146	164	189	217	244	284	308	335	379	401
17	89	108	126	155	173	200	231	259	301	327	356	402	426
18	94	114	133	164	183	212	244	274	319	346	377	426	451
19	99	121	140	173	193	223	257	389	336	365	498	449	477
20	104	127	147	182	203	236	271	304	354	384	419	473 497	501
21	109	133	154	191	213	247	284	319	371	403	440	497	527
22	114	139	161	200	223	259	297	334	389	422	461	520	552
23 24	119	145	168	209	233	270	311	349	407 424	441	681	542 568	068
24	124 129	151 157	176 183	218 227	243 253	282 293	325 337	364 379	424	460 479	502 523	591	568 613 628
25 26	134	163	190	236	263	305	350	394	459	498	544	615	653
27	139	169	197	245	273	316	363	409	477	517	565	639	653 678
28	144	175	204	254	283	328	376	424	494	536	586	663	703
29	149	181	211	263	293	339	389	439	512	555	607	687	703 728 753
30 31	154	187	218	272	303	351	402	454	529	574	628	711	753
31	159	193	225	281	313	362	415	469	547	593	649	735	778
					-					The same of			THE PERSON NAMED IN
	D.	D.	D.		D.						D.	D.	
ng.	D.	D.	D.	D.	D.		D.	D.	D.	D.	D.	D.	D.
Lng. Ft.	D. 25	D. 26	D. 27		D. 29						D. 34	D. 35	
-	25	26	27	D. 28	29	_ _:	D. 30	D. 31	D. 32	D. 33		35 543	D, 36
10 11	25 283 311	26 309 340	27 339 374	D. 28 359 396	29 377 415		D. 30 407 447	D. 31 440 484	D. 32 456 502	D. 33 486 535	34 496 546	35 543	D, 36
10 11 12	25 283 311 340	309 340 371	339 374 408	D. 28 359 396 432	29 377 415 453	4	D. 30 407 447 489	D. 31 440 484	D. 32 456 502 548	D. 33 486 535 584	34 496 546 596	35 543 598 653	D. 36 573 630 688
10 11 12 13	25 283 311 340 369	309 340 371 404	339 374 408 442	D. 28 359 396 432 469	29 377 415 453 491		D. 30 407 447 489 530	D. 31 440 484 528 572	D. 32 456 502 548 594	D. 33 486 535 584 633	34 496 546 596 646	35 543 598 653 708	D. 36 573 630 688 746
10 11 12 13 14	25 283 311 340 369 397	309 340 371 404 435	339 374 408 442 476	D. 28 359 396 432 469 505	29 377 415 453 491 529		D. 30 407 447 489 530	D. 31 440 484 528 572 618	D. 32 456 502 548 594 640	D. 33 486 535 584 633 682	34 496 546 596 646 696	35 543 598 653 708 762	D. 36 573 630 688 746 803
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Number of Shingles Required for a Roof



Rule.—Multiply the length of the ridge pole by twice the length of one rafter, and, if the shingles are to be exposed $4\frac{1}{2}$ inches to the weather, multiply by 8, and if exposed 5 inches to the weather, multiply by $7\frac{1}{5}$, and you have the number of shingles.

Note.—Shingles are 16 inches long, and average about 4 inches wide. They are put up in bundles of 250 each.

One bundle 16-inch shingles will cover 30 square feet. One bundle 18-inch shingles will cover 33 square feet.

When laid 5 inches to the weather, 5 pounds 4-penny or 32 pounds 3-penny nails will lay 1,000 shingles.

Slating

The thickness of slates ranges from $\frac{3}{16}$ to $\frac{5}{16}$ of an inch, and their weight varies from 2.6 to 4.5 lbs. per square foot.

The lap of slates varies from 2 to 4 inches. The standard is assumed to be 3 inches.

Rule for computing the number of slates of a given size required per square.—Subtract 3 inches from the length of the slate, multiply the remainder by the width and divide by 2. Divide 14.400 by the number so found, and the result will be the number of slates required.

Dimensions of Slates and Numbers Required to a Square

 12×6 requires 533 to the square; 14×9 requires 291; 18×9 requires 213; 24×13 requires 105.

Number of Laths for a Room

Laths are 4 feet long and $1\frac{1}{2}$ inches wide, and 16 laths are generally estimated to the square yard.

Rule.—Find the number of square yards in the room and multiply by 16, and the result will equal the number of laths necessary to cover the room.

To find the number of square yards in a ceiling or wall, multiply the length by the width or height (in feet) and divide the product by 9; the result will be the square yards.

LARGE LIBRARIES

The fourth largest library in the world is the royal library of Berlin, with 850,000 volumes. It was opened in 1861 by the great elector, Frederick William. Germany has 5,000,000 more books than England.

The royal library at Munich contains 540,000 books and 400,000 pamphlets. This library is specially rich in incunabula and occupies the finest library building in Europe.

The royal library at Stuttgart is famous for its fine collection of Bibles, which includes copies of the Eliot Indian Bible of 1663, the first printed in the New World, and of the Aitkin Bible, issued in 1722.

The imperial library of Russia, established by Peter the Great in 1714, is the third among the world's great libraries. It contains about 1,200,000 volumes and about 26,000 manuscripts. It attained a place in the front rank of European libraries by the acquisition of the celebrated Zaluski collection; Count Zaluski had collected about 260,0000 volumes and 10,000 manuscripts. On the suppression of the Jesuit order in Russia the collection of the books in their possession was taken in charge by Prince Italinski and, among other libraries, the Prince transferred the Zaluski collection from the Jesuit College at Warsaw to St. Petersburg. The most important of the manuscripts in this library is the "Codex Sinaiticus" of the Greek Bible, brought from the convent of St. Catherine on Mount Sinai by Professor Tischendorf in 1859.

RULE FOR ASCERTAINING THE DAY OF THE WEEK A CERTAIN EVENT HAS OCCURRED, OR WILL OCCUR

Divide the year of the occurrence by 4; add only the whole number of the quotient to the year of the occurrence, and to this sum the number of days from the 1st of January to the day of the month of the occurrence. Divide the result by 7, and the fraction gives us the day of the week; 1 represents Sunday, 2 Monday, and so on, 0 representing Sunday.

Washington was born February 22, 1732. $1732 \div 4 = 433$. 1732 + 433 = 2165. 1st of January to 22d February, 53 days. 2165 + 53 = 2218. $2218 \div 7 = 316$ and a fraction, 6. Hence Washington was born on Friday.

If we wish to find the day of the week for the 14th of January, 1900: $1\,900 \div 4 = 475 + 1900 = 2375 \div 7 = 341$, leaving 2 as a remainder, and the 14th day of January, 1900, falls on Monday.

RULES FOR PAINTING

Usually one-fourth of a pound of paint is allowed for each square yard for the first coat, and one-sixth of a pound for each additional coat. One pound of stopping should be allowed for every 20 square yards.

A gallon of tar and 1 pound of pitch will cover about 12 square yards the first coat, and 17 yards each additional coat.

Priming consists of white lead and linseed oil.

Knotting consists of red lead and size.

Putty consists of Spanish whiting and linseed oil.

White Paint.—Twenty-eight pounds white lead, 6 pints linseed oil, 2 pints turpentine and 1 pound litharge, will cover about 100 square yards.

Black Paint.—Twenty-eight pounds black paint, 10 pints linseed oil, 2 pints turpentine, and 1 pound litharge, will cover about 160 square yards.

Distemper.—One hundred and twelve pounds whiting, 28 pounds dry white lead, and 7 pounds glue, mixed with boiling water.

With ordinary paints, new wood and iron work require four coats, including the priming coat, but exclusive of any flatting coats.

Old paint requires two coats for inside and three for outside work.

The following are the superficial yards which a fixed amount of material will cover in each coat, arrived at from actual measurement of work done with materials issued from store.

First Coat, or Priming

10 lbs. white lead, 1 oz. red lead, 2 oz. litharge,* 4 pints linseed oil.	63 superficial yards.
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Second Coat

10 lbs. white lead, 2 oz. litharge,* 2½ pints linseed oil, 1½ pints spirits of turpentine.	100 superficial yards.
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Third and Fourth Coats

10 lbs. white lead,	
2 oz. litharge,*	113 superficial yards.
2 pints imseed on,	115 superiiciai yards.
2 pints spirits of turpentine.)
*Or 1 oz. burnt white vitriol, and	1 14 oz. of litharge.

For outside work, when exposed to the sun, more turpentine should be used to prevent the paint from blistering, and only boiled linseed oil should be used. For inside work raw linseed may be used, but the less oil the less gloss. For the flatting coat, the color being ground in oil, only turps is added. For colored paints, the last two coats have the color added to the composition in the proportion of 1 to 2 pounds for every 10 yards of surface to be painted; and the quantity of white lead is reduced in proportion.

TO MIX INKS OR PAINTS FOR TINTS

A larger quantity of the first-named color must always be used.

Dark green and purple make bottle green.

White and medium yellow make buff tint.

Red, black and blue make dark brown.

Bronze blue, lemon yellow and black make dark green.

White, medium yellow and black make drab tint.

White, lake and lemon yellow make flesh tint.

Lemon yellow and bronze blue make grass green.

White and black make gray tint.

White and purple make lavender tint.

Red, black and medium yellow make maroon.

Lake and purple make magenta.

Medium yellow and purple make olive green.

Medium yellow and red make orange.

White, ultramarine blue and black make pearl tint.

White and lake make pink.

Ultramarine blue and lake make purple.

Orange, lake and purple make russet.

Medium yellow, red and white make sienna.

White and ultramarine blue make sky blue.

Ultramarine blue, black and white make slate.

Vermilion and black make Turkey red.

White, yellow, red and black make umber.

How to Mix Paints of Simple Colors to Produce Various Tints

Buff.—White lead and yellow ocher.

Chestnut.—Light red and black.

Cream Color.—Same as for buff, but with more white.

Chocolate.—Black, with Spanish brown, or Venetian red.

Drab.—White lead, burnt umber, and a little yellow ocher (warm); white lead, raw umber, and a little black (cool).

Fawn Color.—Same as for flesh color, with stone ocher instead of lake.

Flesh Color.—Lake, white lead, and a little vermilion.

French Gray.—White lead with Prussian blue and a little lake.

Gold Color.—Chrome yellow with a little vermilion and white lead; or Naples yellow and realgar.

Gray (common).—White lead and a little black.

Lead Color.—White lead with black or indigo.

Lemon Color.—Chrome yellow and white lead; more of the first than in straw color.

Lilac.—Same as for French gray, but with less white.

Mahogany Color.—A little black with purple brown or Venetian red.

Oak Color.—White lead with yellow ocher and burnt umber.

Olive.—Black, yellow, and a little blue; or yellow, pink, lampblack, and a little verdigris.

Olive Green.—Prussian blue and raw umber.

Orange.—Chrome yellow and vermilion (bright), yellow ocher and red lead (duller).

Pea Green.—White lead and Brunswick green; or white lead, Prussian blue, and some chrome yellow.

Peach Color.—White lead, with vermilion, Indian red, or purple brown.

Pearl Gray.—White lead, with a little black, and a little Prussian blue or indigo.

Purple.—White lead, vermilion, indigo or black, rich, dark red or colors for French gray.

Sage Green.—Prussian blue, raw umber, and a little ocher, with a little white.

Salmon Color.—Venetian red and white lead.

Silver Gray.—Same as for pearl gray.

Sky Blue.—White lead, Prussian blue, and a little lake.

Stone Color.—White lead and yellow other, with a little burnt or raw umber.

Stone Color (gray).—White lead, and a small quantity of black. Straw Color.—Chrome yellow and white lead.

Violet.-Vermilion, white lead, and indigo or black.

PRICE OF WOOD PER CORD

Explanation—Opposite any number of feet in the left hand column will be found the Thus: 88 feet at \$4.50 per cord=\$3.09 amount at any price given at the top.

\$6.00	40.00	14.	Σįς	383	.32	.37	.74	1.12	1.50	1.87	2.25	.2.62	3.00	3.37	374	3.94	4.12	4.30	4.49	4.78	5.24	5.62	6.00
\$5.50	40.	.12	.17	153	.30	:34	89.	1.03	1.37	1.72	2.06	2.40	2.75	3.09	3.43	3.60	3 70	3.95	4.12	4.47	4.80	5.15	5.50
\$5.00	.03	Ξ;	10	183	.27	E	.62	.93	1.25	1.56	1.87	2.18	2.50	2.81	3.13	3.28	3.43	3.59	3.75	4.05	4.38	4.68	2.00
\$4.50	.03	9;	41.		.24	.28	.56	.84	1.12	1.40	1.68	1.96	2.25	2.53	2.81	2.95	3.09	3.23	3.37	3.65	3.93	4.21	4.50
\$4.00	80.	60;	12	3∞	.21	.24	.49	.75	1.00	1.25	1.50	1.75	2.00	2.22	2.50	2.62	2.75	2.87	3.00	3.25	3.50	3.75	4.00
\$3.50	0.05	8	01.	19	.19	.21	.43	.65	20	1.09	1.31	1.53	1.75	1.96	2.18	2.29	2.40	2.51	2.62	2.84	3.06	3.28	3.50
\$3.25	.02	.07	01.	; ;	.17	.20	.40	19.	8.	1.02	1.22	1.42	1.62	1.83	2.03	2.13	2.23	2.33	2.44	2.64	2.84	3.05	3.25
\$3.00	0.02	.00		1.12	.16	.19	.37	.56	.75	.94	1.12	1.31	1.50	1.69	1.88	1.97	2.06	2.15	2.25	2.44	2.62	2.81	3.00
\$2.75	20.	99	6; -	13.	.15	.18	.35	52	69:	98:	1.03	1.20	1.38	1.55	1.72	1.81	1.89	1.98	2.06	2.23	2.41	2.58	2.75
\$2.50	20.	90.	8	12	.14	91.	<u></u>	.47	.63	.78	.94	1.09	1.25	1.41	1.56	1.64	1.72	1.80	1.88	2.03	2.19	2.34	2.50
\$2.25	0.00	.05	0.00	ŝ=	.12	.14	.28	.42	.56	.70	\$.	86.	1.13	1.27	1.41	1.48	1.55	1.62	1.69	1.88	1.97	2.11	2.25
\$2.00	10.0	70.	900		Ξ	.12	.25	.37	03.	63	.75	8	1.00	1 13	1.25	1.31	1.38	1.44	1.50	1.63	1.75	88.	2.00
\$1.75	10.	70.	900	5,8	10	1	.22	8	,44	.55	99.	22.	86	86.	1.09	1.15	1.20	1.26	1.31	1.42	1.53	1.64	1.75
\$1.50	0.00	03	0,0	200	80.	60.	.19	.28	ထို	.47	99°	19:	.75	8.	.94	86.	1.03	1.08	1.13	1.22	1.31	1.41	1.50
Ft.	100	100	4, 1	ဂ ဗ	<u>[-</u>	00	16	24	32	40	48	56	64	72	80	84	88	92	96	104	112	120	128

Number of Cords in a Pile of Wood

A cord of wood is a pile 8 feet long, 4 feet wide and 4 feet high and contains 128 cubic feet.

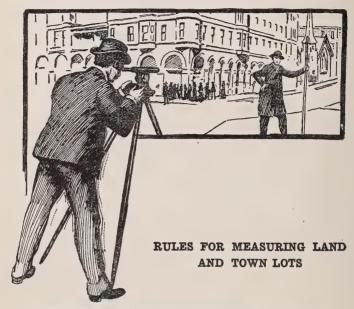
Rule.—Multiply the length in feet by the width in feet and that result by the length in feet and divide the product by 128 and you have the number of cords.

Example.—How many cords in a pile of wood 4 feet wide, 7

feet high, 24 feet long?

Solution. $-4 \times 7 \times 24 = 672$ cubic feet. $672 \div 128 = 5\frac{1}{4}$ cords. Ans.

VALUABLE MISCELLANEOUS MATTER



To find the number of acres in a rectangular piece of land.

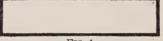
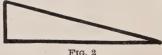


FIG. 1

Rule.—Multiply the length in rods by the breadth in rods, and divide by 160.

TRIANGULAR PIECES

When the triangle is a right-angled triangle.



Rule.—Multiply the width by the length and divide by 2. Example.—How many acres of land in a triangular field 60 rods long and 40 rods wide?

OPERATION

 $60 \times 40 \div 2 = 1,200 \text{ sq. rods.} \quad 1,200 \div 160 = 7\frac{1}{2} \text{ acres.}$

WHERE THE TRIANGLE IS NOT A RIGHT ANGLED TRIANGLE



If a triangle is without a right angle, a perpendicular has to be found.

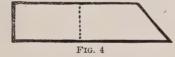
Rule.—Multiply the base in rods by the perpendicular height in rods, and divide by 2, and you have the area in square rods.

Example.—How many acres in a triangular field whose base or side is 140, and its width (perpendicular height) is 60 rods?

OPERATION

 $140 \times 60 \div 2 = 4,200 \text{ sq. rods.}$ $4,200 \div 160 = 26\frac{1}{4} \text{ acres.}$ Ans.

To find the area of a piece of land when only two of the oppoiste sides are parallel.



Rule.—Add the two parallel sides together, and divide by 2, and you have the average length. Then multiply the width in rods by the length in rods and divide by 160, and you have the number of acres.

Example.—How many acres of land in a field, the two parallel sides of which are 80 and 120 rods long, and 50 rods wide?

OPERATION

 $80+120 \div 2=100$ rods. $100 \times 50 \div 160=31\frac{1}{2}$ acres. Ans.

To Lay Off Small Lots of Land

Farmers and gardeners often find it necessary to lay off small portions of land for the purpose of experimenting with different crops, fertilizers, etc. To such the following rules will be helpful:

One acre contains 160 sq. rods. or 4,840 sq. yards, or 43,560 sq. feet. To measure off one acre it will take 208,75 feet each way.

One-half acre it will take $147\frac{1}{2}$ feet each way. One-third acre it will take $120\frac{1}{2}$ feet each way. One-fourth acre it will take $104\frac{2}{3}$ feet each way. One-eighth acre it will take $73\frac{2}{4}$ feet each way.

To Measure Town Lots

Rule.—Multiply the length in feet by the width in feet and divide the result by 43,560 and you will have the fractional part of an acre in the lot.

Example.—What part of an acre is there in a lot 100 feet deep and 75 feet wide?

Solution.— $100 \times 75 = 7,500$ sq. feet. $\frac{7,500}{43,560} =$ or about 1-6 of an acre.

To Find the Number of Acres in a Given Number of Square Rods

Rule.—Remove the decimal point two places to the left in the number of square rods, divide by 8 and multiply by 5, and you have the number of acres.

Example.—How many acres in a piece of land 80 rods long and 40 rods wide? $80\times40=3200$. 3200 with the point removed equals $32.00\div8=4\times5=20$ acres.

TABLE SHOWING THE VALUE OF FOREIGN COINS AND PAPER NOTES IN AMERICAN MONEY BASED UPON THE VALUES EXPRESSED IN TABLE SHOWN ON PAGE 418

100 100 100 100 100	Number.
\$4 43.5 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	British £ Sterling.
\$0.23.8 0.47.8 0.057.4 0.057.4 1.40.8 1.66.8 1.66.8 1.66.8 2.14.8	German Mark.
\$0.038,60 0.038,60 0.77,96 0.77,96 0.77,96 0.77,96 0.65,20 0.6	French Franc, Italian Lira.
\$0.00 1.20,4 1.20,6 2.40,6 4.21,4 4.21,4 1.20,4 1.20,2 60.20 60.20	Chinese Tael (Shanghai).
\$0.40,2 1.60,6 1.60,6 2.41,2 2.41,2 3.61,6 4.02 1.60,6 4.02 1.60,6 1.60,	Dutch Florin.
\$0.32 0.6428 0.6428 1.29728 2.2048 52.2048 6.488	Indian Rupee.
\$0.51, 5 1.03, 5 1.03, 5 1.03, 5 2.06, 5 2.	Russian Gold Ruble.
\$0.40,6 0.40,6 0.40,6 0.81,2 0.81,2 1.42,1 1.42,1 1.42,1 1.82,1 2.0,0 3.7 2.0,0 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7	Austrian Crown.

VALUE OF FOREIGN COINS IN UNITED STATES MONEY

(Proclaimed by the Secretary of the Treasury, October 1, 1903.*)

Country.	Standard	Monetary Unit.	Value in U. S. Gold Dollar.	. Coins,
Argentine Republic	Gold	Peso	\$0.96,5	Gold: argentine (\$4.82,4) and ½ argentine.
Austria-Hungary	Gold Grown.	Crown	.20,3	Suver: peso and divisions. Gold: former system—4 florins (\$1.92,9), 8 florins (\$3.85,8), ducat (\$2.28,7), and 4 ducats (\$9.14,9), Silver: 1 and 2 florins.
Belgium	Gold	Franc	.19,3	Gold: present system—20 crowns (\$4.05,2) and 10 crowns (\$2.02,6). Gold: 10 and 20 francs. Silver: 5 francs.
BoliviaBrazil	Silver Gold	Boliviano	.40,8 .54,6	Silver: boliviano and divisions. Gold: 15, 10, and 20 milreis. Silver: \(\frac{1}{2}, 1, \) and
Canada	Gold Silver Gold	DollarPesor	1.00 .40,8 .36,5	2 miners. Silver: peso and divisions. Gold: escudo (\$1.82,5), doubloon (\$3.65), and
China	Silver	Tael‡ Tientsin.	.60,2	condor (\$7.30), Silver: peso and divisions.
Colombia	Silver	Peso		Gold: condor (\$9.64,7) and double-condor.
Costa Rica	Gold	Colon	.46,5	Gold: 2, 5, 10, and 20 colons (\$9.30,7). Silver:
Cuba	Gold	Peso	.92,6	Gold: doubloon (\$5.01,7); Alphonse (\$4.82,3).
DenmarkEcuador	Gold	Crown Sucre.	.26,8 .48,7	Cold: 10 and 20 crowns. Gold: 10 sucres (\$4.86,65). Silver: sucre and
Egypt	Gold	Gold Pound (100 piasters).	4.94,3	divisions. Gold: pound (100 piasters), 5, 10, 20, and 50 piasters. Diasters. Silver: 1, 2, 5, 10, and 20 piasters.
				Fernancia Control Control

VALUE OF FOREIGN COINS IN UNITED STATES MONEY. - Continued

Country.	Standard	Monetary Unit	Value in U. S. Gold Dollar.	Coins.
France Germany Great Britain Greece.	Gold Gold Gold	Franc	.19,3 23,8 4.86,63	Gold: 5, 10, 20, 50, and 100 frs. Silver: 5 frs. Gold: 5, 10, and 20 marks. Gold: 6, 10, and 20 marks. Gold: sovereign (pound sterling) and ½ sov'gn. Gold: 5, 10, 20, 50, and 100 drachmas. Silver:
HaytiIndia	Gold	Gourde	.96,5	5 drachmas. Gold: 1, 2, 5, and 10 gourdes. Silver. gourde and divisions.
Italy. Japan	Gold	LiraYen	.19,32 .49,8	Gold: 5.00, 20, 50, and 100 lite. Silver: 5 lire. Gold: 1, 2, 5, 10, and 20 yen. Silver: 10, 20, and 50 sen.
Mexico	Silver	Dollar	.44,3	Gold: dollar (\$0.98,3), 2½, 5, 10, and 20 dollars. Silver dollar (or neso) and divisions
Netherlands. Newfoundland Norway.	Gold Gold	Florin Dollar Crown	.40,2 1.01,4 .26.8	Gold: 10 florins. Silver: \(\frac{1}{2}\), 1, and \(2\frac{1}{2}\) florins. Gold: 2 dollars (\(\frac{2}{2}\).02.7). Gold: 10 and 20 crowns.
Peru Portugal Russia	Gold Gold	Sol Milreis Ruble	.48,7 1.08 .51,5	
Spain. Sweden. Switzerland.	Gold Gold	Peseta	.19,3 .26,8 .19,3	Dies (\$5.86). Silver: 4, 4, and 1 ruble. Gold: 25 pesetas. Silver: 5 pesetas. Gold: 10 and 20 crowns. Gold: 5, 10, 20, 50, and 100 francs. Silver:
Turkey Uruguay. Venezuela.	Gold Gold	Piaster. Peso. Bolivar.	.04,4 1.03,4 .19,3	 Jurances. Gold: 25, 50, 100, 250, and 500 piasters. Gold: peso. Silver: peso and divisions. Gold: 5, 10, 20, 50, and 100 bolivars. Silver: 5 bolivars.

^{*} The coins of silver-standard countries are valued by their pure silver contents, at the average market price of silver for the three months preceding the date of this circular. * Not including Costa Rica. † The British dollar has the same value as the Mexican at Hong Kong and the Straits Settlement. * The sovereign is the standard coin of India, but the rupee (\$0.32,4) is the money of account, current at 15 to the sovereign.

Miscellaneous Table of Things, Distances, Books, Etc.

A book composed of sheets folded

into 2 leaves is a folio.

A book composed of sheets folded into 4 leaves is a quarto.

A book composed of sheets folded into 8 leaves is an octavo (8vo).

A book composed of sheets folded into 12 leaves is a duodecimo (12mo). A book composed of sheets folded

into 16 leaves is a 16mo.

12 units make 1 dozen.

12 dozen make 1 gross. 12 gross (144 dozen) make 1 great gross.

20 units make 1 score.

56 pounds of butter make 1 firkin:

100 pounds of fish make 1 quintal.
196 pounds of flour make 1 barrel.
200 pounds of beef, pork, shad or
salmon make 1 barrel.

24 sheets of paper make 1 quire.

20 quires make 1 ream. 2 reams make 1 bundle. 5 bundles make 1 bale.

3 barleycorns make 1 inch.

18 inches make 1 cubit. 22 inches make 1 sacred cubit.

9 gallons make 1 English firkin. 2 firkins make I kilderkin.

2 kilderkins make 1 barrel. 25 pounds make 1 keg (powder). 100 pounds make 1 cental (grain

measure). 100 pounds make 1 cask (raisin meas-

256 pounds make 1 barrel of soap.

280 pounds make 1 barrel of salt. 31½ gallons make 1 barrel (wine measure). 42 gallons make 1 tierce (wine meas-

ure 63 gallons make 1 hogshead (wine

measure). 84 gallons make 1 puncheon (wine

measure).

126 gallons make 1 pipe (wine meas-

252 gallons make 1 tun (wine measure

8 bushels of wheat (of 70 lbs. each) make 1 quarter (European measure)

8 bushels of salt make 1 hogshead. 36 bushels of coal make 1 chaldron (English).

32 bushels make 1 chaldron (American).

14 pounds make 1 stone.

21½ stones make 1 pig (iron).

8 pigs make 1 fother.

24% cubic feet (masonry) make 1 perch.

100 square feet (carpentry) make 1 square.

1,760 yards (5,280 feet) make 1 statute mile.

2,028.63 yards (6,085.9 feet) make 1 nautical mile. 3 miles make 1 league.

69½ statute miles make 1 degree (of latitude)

60 geographical miles make 1 degree (of latitude).

360 degrees make 1 circle.

500 degrees make 1 case.

9 inches make 1 quarter (of a yard),

3 quarters make 1 ell (Flemish),

5 quarters make 1 ell (English),

6 quarters make 1 ell (French),

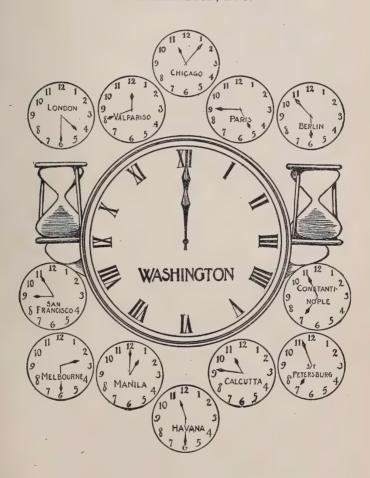
4 inches make 1 hand (measuring

horses). feet make 1 fathom (depth of

water). 120 fathoms make 1 cable-length. 7½ cable-lengths make 1 mile.

640 acres make 1 square mile. 36 square miles make 1 township. 4 farthings make 1 penny (marked d). 12 pence make 1 shilling (marked s). 20 shillings make 1 pound (marked £). 21 shillings make 1 guinea. 5 shillings make 1 crown.

ILLUSTRATION SHOWING THE TIME IN PRINCIPAL CITIES OF THE WORLD, WHEN IT IS NOON IN WASHINGTON, D. C.



DISTANCES AND MAIL TIME TO FOREIGN CITIES FROM THE CITY OF NEW YORK

By Postal Route to—	Miles.	Days.
Adelaide, via San Francisco	12,845	3
Alexandria, via London	6,150	13
Amsterdam, via London	3,985	9
Antwerp, via London	4,000	9
Athens, via London	5,655	12
Bahia, Brazil	5,870	21
Bangkok, Siam, via San Francisco	12,990	43
Batavia, Java, via London	12,800	34
Berlin, via London	4,385	9
Bombay, via London	9,765	24
Bremen, via London.	4,235	8
Buenos Ayres, via London	8,045	25
Buenos Ayres.	8,045	25
Calcutta, via London	11,120	26
Cape Town, via London	11,245	27
Constantinople, via London	5,810	Ĩi
Florence, via London	4.800	10
Glasgow	3,375	10
Greytown, via New Orleans	2,810	7
Halifax, N. S.	645	2
Hamburg, via London	4.340	9
Hamburg, direct	4.820	9
	1 413	3
Havana Hong Kong via San Francisco	10,890	25
Honolulu, via San Francisco.	5.645	13
Timerroel		
Liverpool	3,540	8
London, via Queenstown.	3,740	8
London, via Southampton.	3,760	8
Madrid, via London	4,925	9
Melbourne, via San Francisco.	12,265	32
Mexico City (Railroad)	3,750	5
Panama	2,355	7
Paris	4,020	8
Rio de Janeiro	6,204	23
Rome, via London	5,030	9
Rotterdam, via London	3,935	9
St. Petersburg, via London	5,370	10
Shanghai, via San Francisco	9,720	25
Stockholm, via London	4,975	10
Sydney, via San Francisco	11,570	31
Valparaiso, via Panama	5,910	37
Vienna, via London	4,740	10
Yokohama, via San Francisco	7,348	20

OCEAN DISTANCES

	Nautical Miles.	Statute Miles
From New York to Queenstown	2,823	3,252
From New York to Liverpool	3,053 3,169	3.517 3.650.7
From New York to Gibraltar	3,204	3.691
From New York to Hamburg	3,600	4,147.2
From New York to Antwerp	3,370 4.190	3,882
From San Francisco to Honolulu.	2,100	4,826.9 2,419
From Honolulu to Yokonama	3,400	3,196.8
From San Francisco to Shanghai	6,700	7,718.4
From San Francisco to Hong Kong From San Francisco to Manila	7,500 6,215	$\frac{8,640}{7,160}$

Distances, Mail Time, Passenger Fares and Variations of Time between New York City and Principal Places in the United States

	Miles	Mail	Time	Railroad	Time when
NAMES OF CITIES.	by rail	from	N.Y	Fares from	
THE OF CHILDS	from			N. Y.	at N. Y
	N. Y.	Hrs.	Min		
Albana N. V	142	3	30	\$3.10	12.01 P.M.
Albany, N. Y	882	24	15	25.50	11.18 A.M.
Atlanta, Ga	188	6		6.20	11.50 A.M.
Boston, Mass	217	7		6.00	12.12 P.M.
Buffalo, N. Y	410	11	30	9.25	11.40 A.M.
Charleston, S. C.	804	21	15	24.00	11.36 A.M.
Chicago, Ill	913	25		20.00	11.05 A.M.
Cincinnati, Ohio	744	23		18.00	11.18 а.м.
Cleveland, Ohio	568	19	30	13.00	11.29 A.M.
Columbus, Ohio	624	20		16.25	11.24 A.M.
Concord, N. H	292	9	30	7.15	12.10 P.M.
Denver, Colo	1,930	60	30	59.75	9.57 A.M.
Des Moines, Iowa	1,257	37	30	31.20	10.42 A.M.
Detroit, Mich.	743	21		15.00	11.24 а.м.
Fort Wayne, Ind	764	20		16.75	11.15 A.M.
Galveston, Tex	1,789	56	30	49.25 5.10	10.30 A.M.
Harrisburg, Pa	182 112	6 4	• •	$\frac{3.10}{2.65}$	11.49 A.M. 12.05 P.M.
Hartford, ConnIndianapolis, Ind	808	23	• •	19.00	12.05 P.M. 11.12 A.M.
Kansas City, Mo	1,302	38	i5	32.75	10.37 A.M.
Leavenworth, Kan	1.366	41	10	32.75	10.37 A.M.
Little Rock, Ark	1,290	45		42.85	10.47 A.M.
Louisville, Ky	854	30		22.00	11.14 A.M.
Memphis, Tenn	1,163	40		32.00	10.55 A.M.
Milwaukee, Wis	985	29	15	23.00 .	11.05 A.M.
Mobile, Ala	1,230	35	30	40.75	11.04 а.м.
Montgomery, Ala	1,057	30	30	32.00	11 10 A.M.
Nashville, Tenn	993	33	40	29.45	11.09 A.M.
New Orleans, La	1,344	40	:: 1	42.75	10.56 A.M.
Norfolk, Va Omaha, Neb	450	15	20	8.50	11.51 A.M.
Omana, Neb	1,383	43	• •	36.00	10.32 A.M.
Philadelphia, Pa	90 431	3 13	• •	$\begin{array}{c} 2.50 \\ 12.50 \end{array}$	11.55 A.M. 11.36 A.M.
Pittsburg, Pa Portland, Me.	325	12	• •	9.00	12.15 P.M.
Providence, R. I	189	6	• •	5.00	12.10 P.M.
Richmond, Va	344	11	15	12.85	11.46 A.M.
Sacramento, Cal	3,099	103	30	136.00	8.50 A.M.
St. Louis, Mo	1 048	29		24.25	10.55 A.M.
St. Paul. Minn.	1,300	37		31.35	10.44 A.M.
Salt Lake City, Utah	2,452	71	30	115.50	9.28 A.M.
San Francisco, Cal	3,250	106		136.00	8.46 A.M.
Savannah, Ga	905	26		25.00	11.32 A.M.
Springfield, Ill.	1,059	35		24.00	10.58 A.M.
Trenton, N. J.	57	2		175	11.54 A.M.
Vicksburg, Miss.	1,288	50	20	39.25	10.53 A.M.
Washington, D. C	228 496	6	30	$\begin{bmatrix} 7.50 \\ 14.25 \end{bmatrix}$	11.48 A.M.
Wheeling, W. Va	117	5	10	3.10	11.33 A.M. 11.54 A.M.
Willington, Del	116	9 '	!	0.10	11.04 A.M.

Note.—As the fares by railway are constantly varying, and time tables vary somewhat by different trains, the mail time and passenger fares above given are to be taken as approximately correct.

TABLE SHOWING DISTANCES AND RAILWAY FARES FROM CHICAGO TO ALL PRINCIPAL CITIES OF THE UNITED STATES AND CANADA.

(First=Class Fare only is Given.)

CITIES	MILES.	FARE.	CITIES	MILES.	FARE.
AkronO.	368	\$ 8 50	DunkirkN. Y.	500	\$13 50
Albany	804	16 65	DuluthMinn.	478	13 55
AlbuquerqueN.M.	1,391	43 00	ElginIll.	36	1 10
Allegheny CityPa.	467	12 00	EriePa.	452	12 65
Allentown Pa. Alliance O.	916 385	18 00	EvansvilleInd. Fall RiverMass.	287 1,042	8 65 19 82
AltoonaPa.	686	15.50	Fargo N D	645	19 82
AnnapolisMd.	834	17 50	FargoN. D. FernandinaFla	1,083	27 80
AtlantaGa.	733	21 40	Fitchburg Mass.	954	19 00
Atlantic City N. J.	886	19 25	Fort WayneInd.	148	4 45
AtchisonKan.		12 50		239	7 15
AugustaMe.	1,182	22 50	Fort Scott Kan.	557	14 60
AugustaGa.		25 70	Fort WorthTex.	957	26 95
Aurora	987	92 10	FrankfortKy: FreeportIll.	368 114	9 96 3 32
BangorMe.	1,263		GalvestonTex.	1,152	32 50
Baltimore	792		GalesburgIll.	164	4 88
Battle Creek Mich.	164		GottysburgPa.	771	17 50
Bay City Mich.	296	872	Grand RapidsMich.	215	5 40
BellaireO.	469		GrenadaMiss.	618	1874
Berlin Ont.	445		Green BayWis.	198	5 95
BirminghamAla.	1.004		GreenvilleTex.	905	26 10
BostonMass. BridgeportConn.	968	19 69	HamiltonCan. HamiltonO.	472 238	11 50 8 05
Buffalo			HannibalMo.	329	7 25
BurlingtonIa.	207	6 17		716	17 25
BurlingtonVt.	1,095		HartfordConn.	961	19 50
CairoIll.	365	10 94	HastingsNeb.	638	17 15
Canton O.	367		Haverhill Mass.	1,034	19 75
Cape MayN. J.	903		HelenaMont.	1.562	46 50
Cedar RapidsIa. CharlestonS. C.	271 1,103	6 85		686	20 25
ChattanoogaTenn.	595	20 30 17 30	Holly SpringsMiss. HoustonTex.	543 1,102	15 85 31 00
Cheyenne	1.000	28 65	HudsonN.Y.	836	19 31
CincinnatiO.	300	800	IndianapolisInd.	183	5 00
ClevelandO.	339		Iowa CityIa.	237	6 64
ColumbusO. Council BluffsIa.	314	8 35	Ithaca	666	15 30
Council BluffsIa.	488	12 50	JacksonvilleFla.	1,083	27 80
ColumbiaS. C.	837		JacksonMiss.	730	22 00
ConcordN. H.	763 975		JacksonMich.	209	5 50 2 73
Corsicana Tex Crestline O.	280		JanesvilleWis. Jefferson CityMo.	91 376	11 05
Dallas:Tex.	760		Joliet Ill.	37	108
Davenport Ia.	183		Kalamazoo Mich.	141	4 00
DaytonO.		7 27	Kansas City Mo.	458	12 50
DecaturIll.	170	4 46	KeokukIa.	250	7 15
DenverColo.	1,118		KnoxvilleTenn.	566	16 00
Des Moines1a.	257	10 15	La CrosseWis.	280 85	7 86
DetroitMich.	211 921	10 70	Lake GenevaWis.	85	2 40 18 25
DoverDel. DubuqueIa.			LancasterPa. LansingMich.	754 220	18 25 5 05
waoaqao	. 200	U.UI		660	9 00

Note.—As the fares by railway are constantly changing, and time tables vary somewhat by different trains, the distance and

	1		1		
CITIES	MILES.	FARE.	CITIES	MILES.	FARE.
LeadvilleColo.	1,169	\$37 50	QuincyIll.	262	\$7 25
LeavenworthKan.	589	12 50	RacineWis.	62	1 85
LexingtonKy.	376	10 40	RaleighN. C. RichmondInd.	1,154	27 35
LincolnNeb.	552	14 40	Richmondlnd.	223	6 75
Little RockArk.	628	17 85	RichmondVa. RockfordIll,	881	21 00
LogansportInd. Long BranchN. J.	116 914		RochesterN. Y.	86 550	2 50 13 38
LondonCan.	399	9 95	Rock IslandIll,	181	4 97
Los AngelesCal	2,266	62 50	Rome	711	15 78
Lyonsla.	137	4 27	San AntonioTex.	1,213	34 50
MadisonInd.	269	7 00	San AntonioTex. SaginawMich.	283	8 42
Madison	138	3 92	SacramentoCal.	2,257	62 50
ManchesterN. Y.	611 821	14 14	Salt Lake CityUtah. Santa FeN. M. SanduskyO.	1,566	42 25 41 05
MaconGa. ManitowocWis.	162	4 07	Sandacky O	1,342 307	8 25
Marquette Mich.	390	10.87	Savannah Ga	1.088	26 30
MarshalltownIa.	288	860	Savannah Ga. San Francisco Cal. Seattle Wash.	2,411	62 50
MemphisTenn.	528	15 90	SeattleWash.	2,215	61 50
MenomineeMich.	265	7 Qn	Sherman Tex	871	25 35
MilwaukeeWis.	85	255	Shreveport La. Sioux City Ia. Springfield O. Springfield Ill.	815	24 05
MinneapolisMinn.	402	11 50	Sioux City	510	12 75
MolineIll. MontpelierVt.	165 1,224	10.00	Springfield	300	7 75 4 75
MontgomeryAla.	793	21.00	SpringfieldMass.	185 935	19 00
MobileAla.	973	22.00	Spokane FallsWash.	1,914	56 50
Montreal Can.	837	18 00	SteubenvilleO,	426	13 30
MuscatineIa.	211	5.86	St. Louis Mo.	280	7 50
MuscatineIa. NashvilleTenn. Nebraska CityNeb.	444	13 50	St. PaulMinn. St. JosephMo.	410	11 50
Nebraska CityNeb.	498	13 00	St. JosephMo.	469	12 50
New York	913	18 00	Syracuse N. Y.	673	14 98
New HavenConn. New OrleansLa.	915 912	20 25	TacomaWash. TallahasseeFla.	2,314	61 50 27 80
Newark	365	8 95	Terre HauteInd.	1,033 178	5 36
Newark N. J.	905		TexarkanaArk.	773	22 20
NewarkN. Y.	927	18 00	TiffinO.	254	7 40
NewportR.I.	1,044	20 32	Toledo	243	7 00
NewportKy.	408	11 25	TopekaKan.	508	14 00
Niagara FallsN. Y.	513		Toronto,Can.	506	12 40
OgdenUtah. OgdensburgN. Y.	1,514 788	41 50	$egin{array}{lll} { m Trenton} & & N. J. \\ { m Troy} & & N. Y. \end{array}$	859 826	18 00 16 80
Oil CityPa.	498	12 00		267	8 05
OmahaNeb.	497		UticaN. Y.	725	16 04
OttawaCan.	757	18 00	VicksburgMiss.	761	23 00
PasadenaCal.	2,255	6250	VincennesInd.	235	7 10
Paterson N. J.	969	18 00	WacoTex.	1,031	28 80
PensacolaFla.	955	22 00		819	17 50
PeoriaIll.	155 132	4 25	West PointN. Y.	916	18 00
PeruInd. PhiladelphiaPa.	822	4 8 9 5	White Mountains N H	438	11 00
Pine BluffArk.	633	19 00	WheelingW. Va. White MountainsN. H. White Sul. SpgsW. Va.	1,037 637	19 65 16 55
PittsburgPa.	468	11 00	Wilmington Del.	930	18 00
PortlandMe.	1,114	20 50	WinonaMinn.	306	8 62
Portland Ore.	2,329	61 50	WinonaMinn. WinnipegManitoba	845	25 70
Port Huron Mich.	835	7 30	XeniaO. YanktonS. D-	280	8 40
PortsmouthO.	413	10 25	YanktonS. D-	569	15 15
Pueblo Colo.	1,107 14		Youngstown		9 95
PullmanIll. Quebec Can.	1,107	21 00	Zanesville0.	390	9 00
Quooco	241.71	22 (10)			

passenger fares above given are to be taken as approximately correct.

Line of Perpetual Snow

The line of perpetual snow varies with latitude, and is as follows in feet above sea-level.

LATITUDE	FEET	LATITUDE	FEET
0	15,260 14,764 13,478 11,484	40	6,334 3,818

Longest Rivers

	MILES
Missouri-Mississippi	. 4,194
Nile	. 4,020
Yang-Tze	. 3,158
Amazon	. 3,063
Yenisei	.2,960
Amur	
Congo	

Deepest Seas

FEET
Pacific Ocean, deepest30,000
Atlantic
Southern
Indian
Arctic 9,000
Lake Baikal 4,080
Caspian Sea 3,600

A CENTURY OF PROGRESS

The nineteenth century received from its predecessors the horse. We bequeath the bicycle, the locomotive, and the automobile.

We received the goosequill, we bequeath the fountain pen and typewriter.

We received the scythe, we bequeath the mowing machine.

We received the sickle, we bequeath the harvester.

We received the hand printing press, we bequeath the Hoe cylinder press.

We received the painter's brush, we bequeath lithography, the camera, and color photography.

We received the hand-loom, we bequeath the cotton and woolen factory.

We received gunpowder, we bequeath nitro-glycerine.

We received twenty-three chemical elements, we bequeath eighty.

We received the tallow dip, we bequeath the arc light.

We received the galvanic battery, we bequeath the dynamo.

We received the flint lock, we bequeath automatic Maxims.

We received a sailing ship, we bequeath the steamship.

We received the beacon signal fire, we bequeath the telephone and wireless telegraphy.

We received leather fire-buckets, we bequeath the steam fire-engine.

APPORTIONMENT OF REPRESENTATIVES

In the Congress of the United States

Under-	Census.		Appor	tionment	Whole Number of Represent-
CNDER—	Year.	Population.	Year.	Ratio.	atives.
Constitution First Census	1790	3.929.214	1789 1793	30,000 33,000	65 105
Second Census Third Census	1800 1810	5,308,483 7,239,881	1803 1813	33,000 35,000	141 181
Fourth Census Fifth Census	1820 1830	9,633,822 12,866,020	1823 1833	40,000 47,700	213 240
Sixth Census	1840	17,069,453	1843	70,680	223 233
Seventh Census Eighth Census	1860	23,191,876 31,443,321	1853 1863	93,423 127,381	243
Ninth Census Tenth Census	1870 1880	38,558,371 50,155,783	1873 1883	131,425 151,911	293 325
Eleventh Census Twelfth Census	1890 1900	62,622,250 74,565,906	1893 1901	173,901 194,182	356 386

Cost of War and Education

In some tables recently compiled the amount per capita expended by various governments for military and educational purposes is set down as follows:

France. Prussia Russia England Holland	2.04 2.04 3.72 3.58	Education. \$0.70 .50 .03 .62 .74	Military. S2 38	Education. \$0.40 .94 .34 .46 .32
Saxony	2.38	.38	Switzerland	.84

Troops in Wars of the United States

Wars.	Years.	Total troops.
Revolution Northwest Indians With France (Naval) With Tripoli (Naval) Creek Indians War of 1812 Seminole Indians	1775-1783 1790-1795 1798-1800 1801-1805 1813-1814 1812-1815 1817-1818	395,330 8,983 4,593 3,330 13,781 528,274 5,911
Black Hawk Indians Creek Indians Cherokee troubles Florida Indians	1831–1832 1836–1837 1836–1837 1835–1843	5,031 12,483 3,926 29,253
Aroostook troubles. Mexican Apache, Navajo and Utah Seminole Indians Civil War Spanish War	1838-1839 1846-1848 1849-1855 1856-1858 1861-1865 1898	1,500 108,475 2,561 3,687 2,778,304 298,913

COST OF WARS IN THE UNITED STATES

Revolutionary\$ 135,193,703.00
War of 1812–15
Mexican War 100,000,000.00
Rebellion
Estimated cost of Indian wars from July 4, 1776, to June 30, 1886
Spanish-American, including \$20,000,000.00 for Philippine
Islands
Losses in wars—
Losses in wars— Revolution (English)
Revolution (English)
Revolution (English) 50,000 men 1812-15 killed and wounded 5,614 " Mexican War 3,420 "
Revolution (English) 50,000 men 1812-15 killed and wounded 5,614 " Mexican War 3,420 "

^{*}These figures do not include those who died after being mustered out.

BLOODY BATTLES

The losses in the battle on the Yalu in the Japanese-Russian War were from 1,000 to 4,000 men on both sides. Compared with battles in the American Civil War, such losses are as "drops in a bucket." The figures in the following list of the bloodiest battles of the Civil War in the United States are from the "Statistical Record of the Armies of the United States," by Capt. Frederick Phisterer. They include killed, wounded and missing.

Battle.	Union.	Confed-	
		erate.	Total.
Antietam	12,469	25,899	38,368
Atlanta	3,641	8,499	12,140
Bull Run, First	2,952	1,752	4,704
Bull Run, Second	7,800	3,700	11,500
Cedar Creek	5,995	4,200	10,195
Chancellorsville	16,030	12,281	28,311
Chickamauga	15,851	17,804	33,655
Cold Harbor	14,931	1,700	16,631
Corinth	2,359	9,433	11,782
Franklin	2,326	6,252	8,578
Fredericksburg	12,353	4,576	16,929
Gettysburg	23,186	31,621	54,807
Missionary Ridge, etc	5,616	8,684	14,300
Perryville	4,348	4,500	8,848
Shiloh	13,573	10,699	24,272
Stone River	11,578	14,560	16,138
Wilderness	18,387	11,400	29,787

CIVIL WAR STATISTICS

The following, giving the number of persons in the Army, Navy and Marine Corps in the war of 1861-65, is taken from the latest revised reports of the Government:

	White	Sailors.	!
States, Territories, etc.	troops	and	Colored
Statos, admitolics, ord,	of army.	marines.	troops.
Alabama	2,556		
Arkansas	8,289		
California	15,725	-	
Colorado	4,903		
Connecticut	51,937	2,163	1.764
Dakota	206		
Delaware	11,236	94	954
District of Columbia	11,912	1,353	3,269
Florida	1,290		
Illinois	255,057	2,224	1.811
Indiana	193,748	1,078	1,537
Iowa	75,797	5	440
Kansas	18,069		2,080
Kentucky	51,743	314	23,703
Louisiana	5,224		
Maine	64,973	5,030	104
Maryland	33,995	3,925	8,718
Massachusetts	122,781	19,983	3,966
Michigan	85,479	438	1,387
Minnesota	23,913	ర	104
Mississippi	545 100.616	151	0.244
Missouri	3,157	191	8,344
Nebraska Nevada	1,080		
	32,930	882	125
New Hampshire	67,500	8,129	1.185
New Mexico.	6.561	0,129	1,100
New York	409.561	35,164	4,125
North Carolina	3,156		1,120
Ohio	304,814	3,274	5,092
Oregon	1.810		
Pennsylvania	315,017	14.307	8,612
Rhode Island	19,521	1,878	1.837
Tennessee	31,092		
Texas	1,965		
Vermont	32,549	619	120
Washington	964		
West Virginia	31,872		196
Wisconsin	91,029	133	165
Indian Nation	†3,530		
*Colored troops		-	*99,337
· · · · · · · · · · · · · · · · · · ·			
Totals	2,498,122	101,147	178,975

^{*}Number not credited on the quota of any State. † Indians.

The number of casualties reported by the Provost Marshal-General was: Killed in battle, 61,362; died of wounds, 34,727; died of disease, 183,287; total deaths, 279,376; desertions, 199,105. The bounties paid by the several States was (about) \$285,941,036. The nativity of the soldiers in the Federal Army during the war was as follows: United States, 1,523,300; German, 176,800; Irish, 144,200; British-American, 53,500; English, 45,500; other foreigners, 48,400; foreigners, unknown nativity, 26,500.

STATES AND TERRITORIES OF THE UNION
Salaries and Terms of Governors, Areas, Dates of Admission, Thirteen
Original States, Population in 1890 and 1900, and Electoral Vote

	Govern	or's	Area in	When	Popu-	Popu-	Elect Vot	
States and Territories.	Salary.	Term. Years.	Square Miles.	ad- mitted.	lation in 1890	lation in 1900	1900	1904
		rears.						
Alabama	\$5,000	4	52,250	1819	1,513,017	1,828,697	11	11
Alaska	5,000	4	590,884		36,500	63,592		
Arizona	3,000	4 2	113,020 53,850	1836	59,620 1,128,179	122,931 1,311,564	8	· ;
Arkansas California	6,000	4	158,360	1850	1,208,130	1,311,304	9	10
Colorado	5,000	2	103,925	1876	412,198	539,700	4	5
Connecticut	4,000	$\bar{2}$	4,990	*1788	746,258	908,420	6	7
Delaware	2,000	4	2,050	*1787	168,493	184,735	3	3
Dist. of Columbia .			70	1015	230,392	278 718	4	5
Florida	3,500	4	58,680	1845 *1788	391,422	528,542		13
Georgia	3,000 5,000	$\begin{vmatrix} 2\\4 \end{vmatrix}$	59,475 6,740	*1788	1,837,353 89,990	2;216,331 154,001	13	
Hawaii	5,000	2	84.800	1890	84,385	161,172	3	3
Illinois	6,000	4	56,650	1818	3,826,351	4,821,550	24	27
Indiana	5,000	4	36,350	1816	2,192,404	2,516,462	15	15
Indian Territory			31,400		180,389	392,060		1.1
Jowa	5,000	2	56,025	1846	1,911,896	2,231,853	13	13
Kansas	3,000	2	82,080	1861	1,427,096	1,470,495	10	10
Kentucky	6,500 5,000	4 4	40,400 48,720	1792 1812	1,858,635 1,118,587	2,147,174	13	13
Louisiana Maine	2,000	2	23,040	1820	661,086	694,466	6	6
Maryland	4.500	4	12,210	*1788	1,042,390	1.188,044	8	8
Massachusetts	8,000	î	8,315	*1788	2,238,943	2,805 346	15	16
Michigan	4,000	2	58,915	1837	2,093,889	2,429,982	14	14
Minnesota	5 000	2	8,365	1858	1,301,826	1,751,394	9	11
Mississippi	3,500	4	46,810	1817	1,289,600	1,557 270	9 17	10 18
Missouri	5,000 5,000	4	69,415 146,080	1821 1889	2,679,184 132,159	3,106,665 243,329	3	3
Montana Nebraska	2,500	2	77,510	1867	1,058,910	1,066,300	8	8
Nevada	4,000	4	110,700	1864	45,761	42,335	3	3
New Hampshire	2,000	2	9,305	*1788	376,530	411,588	4	4
New Jersey	10,000	3	7,815	*1787	1,444,933	1,883,669	10	12
New Mexico	3,000	4	122,580	******	153,593	195,310	0.0	000
New York	10,000	2	49,170	*1788	5,997,853	7,268,894	36 11	39 12
North Carolina North Dakota	4,000 3,000	4	52,250 70,795	*1789 1889	1,617,947	1,893,810 319,146	3	4
Ohio	8,000	$\frac{2}{2}$	41,060	1803	3.672.316	4.157.545	23	23
Oklahoma	2.400	4	39,030		61,834	398,331		
Oregon,	1,500	4	96,030	1859	313,767	413,536	4	4
Pennsylvania	10,000	4	45,215	*1787	5,258,014	6,302,115	32	34
Porto Rico	8,000	4	3,600	*****	0.15 500	953,243	- ;	.;
Rhode Island	3,000	1	1.250	*1790 *1788	345,506	428,556 1,340,316	9	9
South Carolina South Dakota	3,000	2	30,570 77,650	1889	1,151,149 328,808	401,570	4	4
Tennessee	4.000	2	42,050	1796	1,767,518	2,020,616	12	12
Texas	4,000	2 2 2	265,780	1845	2,235,523	3,048,710	15	18
Utah	4,000	4	84,970	1896	207,905	276,749	3	3
Vermont	1 500	2	9,565	1791	332,422	343,641	4	4
Virginia	5,000	4	42,450	*1788	1,655,980	1,854,184	12 4	12 5
Washington	4,000 2,700	4	69,180 24,780	1889 1863	349,390 762,794	518,103 958,800	6	7
West Virginia Wisconsin	5 000	2	56,040	1828	1,686,880	2,069,042	12	13
Wyoming	2,500	4	97,890	1890	60,705	92,531	3	3
	1				·	77 170 811	447	476

^{*} Dates of ratifying the Constitution by thirteen original States, 77,179,811 447 476

Areas of new possessions not included in above list: Philippines, 140,000 square miles, Guam, 150; Tutuila and islets, 79. Population: Philippines, about 8,000,000; Guam about 8,661; Tutuila, 5,800.

PRESIDENTS OF THE UNITED STATES

Mt. Vernon, Va. 1799 Quincy, Mass. 1826 Monticello, Va. 1836 Mony Peller, Va. 1836 New York Gity. 1831 Washington, D. C. 1845 Lindenwold, N. Y. 1845 Washington, D. C. 1846 Washington, D. C. 1846 Washington, D. C. 1846 Washington, D. C. 1856 Washington, D. C. 1856 Washington, D. C. 1856 Washington, D. C. 1856 Wheatland, Pa. 1868 Washington, D. C. 1865 Carter's Depot, Tenn 1885 Mt. McGregor, N. Y. 1885 Remont, O. 1885 Remont, O. 1886 Long Branch, N. J. 1886 Indianapolis, Ind. 1896
Mt. Vernon, Va. Municy Mass. Monticello, Va. Monticello, Va. Monticeller, Va. Monticeller, Va. Washington, D. C. Hermitige, Tenn. Lindenwold, N. Y. Washington, D. C. Nashville, Tenn. Washington, D. C. Buffalo, N. Y. Conroord, N. H. Wheatland, P. P. Wheatland, P. P. Washington, D. C. Carter's Deport Tenn. Mt. McGregor, N. Y. Fremont, O. Long Branch, N. J. New York City, Indianapolis, Ind.
Fed. Fed. Fed. Fed. Rep. * Rep
7528886886868666666666666666666666666666
17899 18859 18859 18870 18870 18870 18850 18850 18851 18851 18851 18851 18851 18851 18851 18851 18851 18851 18851 18851 18851
Va. X. Y.
English English English English Scotch English Scotch-Irish Duck English
1735 1735 1735 1773 1773 1773 1773 1773
Westmoreland Co., Va., Shadwell, Vt., Fort Conway, Va., Westmoreland Co., Va., Quiney, Mass Quiney, Mass Quiney, Mass Greenway, Va., Rinderhook, N. C.* Kinderhook, N. V. Berkeley, Va. Greenway, Va. Mecklenburg Co., N. C. Summerkill, N. Y. Hillsboro, N. H. Raliegh, N. C. Raliegh, N. C. Point Pleasant, O. Delaware, O. Pourhoga, Co., Point Pleasant, O. Delaware, O. Pourhoga, Co., Raliegh, N. C. Point Pleasant, O. Delaware, O. Culdwell, N. J. North Bend, O. Caldwell, N. J. North Bend, O. Caldwell, N. J.
1 George Washington. 2 John Adams. 3 Thomas Jefferson. 4 James Madison. 4 James Monroe. 6 John Quincy Adams 7 Andrew Jackson. 8 Martin Van Buren. 9 William H. Harrison. 10 John Tyler. 2 Zachary Taylor. 13 Millard Fillmore. 14 Franklin Fieree. 15 James Budhann. 16 Abracham Lincoln. 16 Abracham Lincoln. 17 Andrew Johnson. 18 Ulysse S. Grant. 19 Rutherford B. Hayes. 19 Rutherford B. Hayes. 21 Grover Gleveland. 22 Grover Gleveland. 23 Benjamin Harrison. 24 Grover Gleveland. 23 Benjamin Harrison. 24 Grover Gleveland. 25 Grover Gleveland. 26 Grover Gleveland. 27 Grover Gleveland. 28 Benjamin Harrison. 28 Grover Gleveland. 28 Benjamin Harrison. 28 Grover Gleveland. 28 Benjamin Harrison.
The same of the last twenty and the last twent

party of to-day claims lineal descent from the first Republican party and President Jefferson as its founder, * Political parties were disorganized at the * Jackson called himself a South Carolinian and his biographer, Kendall, recorded his birthplace in Lancaster County, S. C., but Parton has published documentary evidence to show that Jackson was born in Union County, N. C., less than a quarter-mile from the South Carolina line. * The Democratic time of the election of John Quincy Adams. He claimed to be a Republican, but his doctrines were decidedly Federalistic. The opposition to his Admin. istration took the name of Democrats and elected Jackson President.

RELIGIOUS VIEWS AND CHURCH CONNECTIONS OF OUR PRESIDENTS

George Washington was a member of the Episcopal Church, and a great believer in prayer, as is evidenced by numerous messages. One was: "The blessing and protection of Heaven are at all times necessary, but especially so in time of public danger and distress." He also said: "Though I am a member of the Church of England, I have no exclusive partialities."

John Adams was a Congregationalist, and came of a long line of Puritan ancestors, but was very liberal in his views as to religion. He was baptized October 26, 1735, in the first church of Quincy, called "The Church of Statesmen."

Thomas Jefferson's ideas on religion are difficult to classify. He was an admirer of the great Tom Paine, the agnostic, and was denounced from New England pulpits as a "Godless man," but a letter to Mrs. John Adams shows that he believed in a future life, where "we will meet our friends," and his life was a strictly moral one. He belonged to no church.

John Quincy Adams was a Congregationalist, like his father, and wrote a hymn.

Madison and Monroe were both Episcopalians in good standing. Andrew Jackson was notoriously irreligious in his early manhood and mature life. As a youth at Salisbury, he is described as "the most roaring, rollicking, game-cocking, horse-racing, cardplaying, mischievous fellow that ever lived in the town." After his retirement from the Presidency he became converted and joined the Presbyterian Church, his dying words being: "My dear children and friends and servants, I hope and trust to meet you all in heaven, both white and black."

Martin Van Buren never made any religious profession, but was a man of irreproachable morality.

William Henry Harrison was an Episcopalian of strong convictions, which prevented him from fighting duels.

John Tyler was also an Episcopalian.

James K. Polk made no profession until he was on his deathbed, when a Methodist clergyman sprinkled him.

Zachary Taylor apparently gave the matter of religion no thought, but his wife was an Episcopalian, and he contributed to the support of that church.

Millard Fillmore was a very quiet and pious man, who affiliated with the Baptists.

Franklin Pierce was an Episcopal communicant.

James Buchanan was always pious, but didn't join the church until after his retirement from the Presidency, when he became a Presbyterian.

Abraham Lincoln was profoundly reverential, and though uncommitted to any special creed, he was essentially a devout believer. Both his parents were Baptists.

Andrew Johnson was not a member of any church, but a tacit believer in Christianity. He inclined to Methodism.

Ulysses Grant was a Methodist, and extolled for his piety by his biographers, though he was never demonstrative.

Rutherford B. Hayes was a Methodist.

James A. Garfield was a member of the Church of Christ.

Chester A. Arthur was an Episcopalian.

Benjamin Harrison was a Presbyterian, and active in church affairs.

Grover Cleveland is a Presbyterian.

William McKinley was a Methodist.

Theodore Roosevelt is a member of the Reformed Dutch Church, and sometimes preaches from its pulpit.

THE PRESIDENTIAL SUCCESSION

The Presidential succession is fixed by chapter 4 of the acts of the Forty-ninth Congress, first session. In case of the removal, death, resignation, or inability of both the President and Vice-President, then the Secretary of State shall act as President until the disability of the President or Vice-President is removed or a President is elected. If there be no Secretary of State, then the Secretary of the Treasury will act; and the remainder of the order of succession is as follows: The Secretary of War, Attorney-General, Postmaster-General, Secretary of the Navy, and Secretary of the Interior. The acting President must, upon taking office, convene Congress, if not at the time in session, in extraordinary session, giving twenty days' notice. This act applies only to such Cabinet officers as shall have been appointed by the advice and consent of the Senate, and are eligible under the Constitution to the Presidency.

How the Presidents Are Elected

Even the ablest politicians of the country have little more than a superficial knowledge of how Presidents are elected under the electoral system now in use. This feature of the Constitution gave its framers more trouble than any other section.

Properly speaking, there is no popular vote for President. There is only a vote for presidential electors. The President is elected by the States. Each State is given two votes to represent its sovereignty and as many other votes as it may be entitled to representatives: that is, the votes are distributed in proportion to its population. The State casts the vote; the people do not.

On Presidential election day, which occurs every four years on the Tuesday next after the first Monday in November, instead of voting directly for the President and Vice-President of the United States, the qualified voters of each State vote for as many electors as their State has Senators and Representatives in Congress. The names of the electors to be voted for are placed upon the various national tickets, and those elected constitute the Electoral College. After the election those elected meet in their respective States on the second Monday of January following, at the State capital, and ballot for President and Vice-President.

Separate lists are prepared, one copy of which is deposited in the mail and another sent by special messenger to the President of the Senate. The Senate then visits the House of Representatives, the President of the Senate occupying a seat with the Speaker of the House. The President of the Senate announces tellers on the part of the Senate, the Speaker of the House performing a like duty for that body.

The President of the Senate then breaks the seals of the package containing the lists and announces the votes, a note of which is made by the secretary. When this is concluded the result declares the next President and Vice-President.

UNITED STATES ARMY RECRUITING REQUIREMENTS

Applicants for first enlistment must be between the ages of twenty-one and thirty-five years, of good character and temperate habits, able-bodied, free from disease, and must be able to speak, read and write the English language. Minors will not be enlisted.

For infantry and coast artillery the height must be not less than five feet four inches, and weight not less than one hundred and twenty (120) pounds and not more than one hundred and ninety (190) pounds.

For cavalry and field artillery the height must be not less than five feet four inches and not more than five feet ten inches, and weight not to exceed one hundred and sixty-five (165) pounds. No minimum weight is prescribed for these arms, but the chest measures must be satisfactory.

UNITED STATES NAVY PAY TABLE

Rank.	Sea.*	On Shore Duty.	On Leave or Waiting Orders.
Admiral. Rear-Admirals, first nine Rear-Admirals, second nine. Brigadier-General, Commandant Marine	5,500	\$13,5 0 6,375 4,675	
Corps Captains Commanders. Lieutenant-Commanders.	3,500 3,000 2,500	5,500 2,975 2,550 2,125	
Lieutenants. Lieutenants (Junior Grade). Ensigns Chief Boatswains, Chief Gunners, Chief Car-	1,800 1,500 1,400	1,530 1,275 1,190	
penters, Chief Sailmakers. Naval Cadets Mates. Medical and Pay Directors and Inspectors	1,400 500 900	1,400 500 700	\$ 500 500
having the same rank at sea* Fleet-Surgeons and Fleet-Paymasters. Surgeons and Paymasters.	4,400	2,300 to 3,000	2,400 to
Chaplains	2,500 to 2,800 2,400	1,600 to 1,900 1,500	4,000 2,000 to 2,300 2,400
Professors and Civil Engineers Naval Constructors	to 3,500	to 2,600 2,200 to	to 3,500 3,200
The Constitution of the Co		3,200	4,200

^{*} Or shore duty beyond sea.

Warrant officers (boatswains, gunners, carpenters, sailmakers, pharmacists, and warrant machinists) are paid from \$1,200 to \$1,800 a year.

Commandants' clerks and paymasters' clerks receive from \$1,000 to \$1,800 a year.

Petty officers (masters-at-arms, boatswains' mates, gunners' mates, gun captains, quartermasters, machinists, hospital stewards, yeomen, bandmasters, first musicians, coxswains, electricians, boiler-makers, coppersmiths, blacksmiths, plumbers and fitters, sailmakers' mates, carpenters' mates, oilers, printers, painters, water tenders, and hospital apprentices, first class) receive from \$360 to \$840 a year.

The pay of first-class seamen per month is \$24; seamen gunners, \$26; firemen, first class, \$35; musicians, first class, \$32; apprentices, first class, \$21.

The pay of second-class seamen per month is: Ordinary seamen, \$19; firemen, second class, \$30; shipwrights, \$25; musicians, second class, \$30; apprentices, second class, \$15.

The pay of third-class seamen per month is: Landsmen, \$16; coal passers, \$22; apprentices, third class, \$9.

UNITED STATES NAVAL ENLISTMENT

The term of enlistment of all enlisted men of the navy is four years. Minors over the age of eighteen may be enlisted without consent of parents or guardians, but minors under, but claiming to be over eighteen years of age, are liable, if enlisted, to punishment for fraudulent enlistment. Only such persons shall be enlisted as can reasonably be expected to remain in the service. Every person, before being enlisted, must pass the physical examination prescribed in the medical instructions. Applicants for enlistment must be American citizens, able to read and write English, and when enlisted must take the oath of allegiance.

ILLITERACY IN THE UNITED STATES

(Census of 1900)

General Nativity and Color.	Aggre- gate.	Can Re but Can not Writ	n-	Can Neither Read nor Write.		
and Color.	gaic.	Number Per C't.		Number	Per C't	
Aggregate White (total) Native white. Native parents. Foreign parents Foreign white. Colored (total) Persons of negro descent Chinese Japanese Indian	3,200,746 $1,913,611$ $1,734,764$ $178,847$ $1,287,135$ $2,979,323$ $2,853,194$ $25,396$ $4,386$	645,959 445,263 410,013 35,250 200,696 309,884	20.2 23.3 23.6 19.7 15.6 10.4 10.7 4.0 3.1	5,224,226 2,554,787 1,468,348 1,324,751 143,597 1,086,439 2,669,439 24,372 4,249 93,927	79.8 76.7 76.4 80.3 84.4 89.6 89.3 96.0 96.9	

These returns do not apply to the illiteracy of persons of less than ten years of age. $\,$

SALARIES OF UNITED STATES OFFICERS

Civil, Military and Naval

Salaries of the principal United States government officials are as follows: President, \$50,000; vice-president, \$8,000; cabinet officers, \$8,000 each; senators, \$5,000 each, with mileage; speaker of the house, \$8,000; representatives, \$5,000 each, with mileage; chief justice of the Supreme Court, \$10,500; associate justices, \$10,000 each; justices of Circuit courts, \$6,000 each.

Army Pay Table

	PAY OF OFFICERS IN ACTIVE SERVICE.						
GRADE.	Yearly Pay.						
GRADE.	First 5 years' Service.	After 5 years' Service.	After 10 years' Service.	After 15 years' Service.	After 20 years' Service.		
Lieutenant-General Major-General Brigadier-General Lieutenant-Colonel Major Captain, mounted Captain, not mounted Ist Lieutenant, mounted 2d Lieutenant, mounted 2d Lieutenant, not mounted	3,500 3,000 2,500 2,000 1,800 1,600 1,500 1,500	\$3,850 3,300 2,750 2,200 1,980 1,760 1,650 1,650 1,540	20 p. c. \$4,200 3,600 3,000 2,400 2,160 1,920 1,800 1,680	\$4,500 \$3,900 \$,250 \$2,600 \$2,080 \$1,950 \$1,950 \$1,820	\$4,500 4,000 3,500 2,800 2,520 2,240 2,100 1,960		

	Pay of Retired Officers.						
Grades.	Yearly Pay.						
	First 5 years' Service.	After 5 years' Service.	After 10 years' Service.	After 15 years' Service.	After 20 years' Service.		
Lieutenant-General Major-General Brigadier-General Colonel Lieutenant-Colonel Major Captain, mounted Captain, not mounted Ist Lieutenant, mounted	5,625 4,125 2,625 2,250 1,875 1,500 1,350 1,200	\$2,887 2,475 2,062 1,650 1,485 1,320	\$3,150 2,700 2,250 1,800 1,620 1,440	\$3,375 2,925 2,437 1,950 1,755 1,560	\$3,375 3,000 2,625 2,100 1,890 1,680		
1st Lieutenant, not mounted Lieutenant, mounted 2d Lieutenant, not mounted	1,125	1,237 1,237 1,115	1,350 1,350 1,260	1,462 1,462 1,365	1,575 1,575 1,470		

Chaplains have the rank, pay, and allowances of captains of infantry.

The pay of non-commissioned officers is from \$18 to \$45 per month and of privates \$13 per month. Services in Porto Rico, Cuba, Philippines, Hawaii, and Alaska, 10 per cent additional for officers and 20 per cent for enlisted men.

BUSINESS FAILURES IN THE UNITED STATES 1857 TO 1902

YEAR	Failures	Amount of Liabilities	YEAR	Failures	Amount of Liabilities
1857	4,932	\$291.750.000	1880	4,735	\$ 65,752,000
1858	4,225		1881	5,582	81,155,932
1859	3,913	64,394,000	1882	6,738	101,547,564
1860	3,676	79,807,000	1883	9.184	172,874,172
1861	6,993	207,210,000	1884	10,968	226,343,427
1862	1,652	23,049,000	1885	10,637	124,220,321
1863	495	7,899 900	1886	9,834	114,644,119
1864	520	8,579,000	1887	9,634	167,560,944
1865	530	17,625,000	1888	10,679	123,829,973
1866	1,505		1889	10,882	148,784,337
1867	2,780	96,666,000	1890	10,907	189,856,964
1868	2,608	63,691,000	1891	12,273	189,868,638
1869	2,799	75,054,054	1892	10,344	114,044,167
1870	3,546		1893	15,242	346,779,889
1871	2,915	85,252,000	1894	13,885	172,992,856
1872	4,069	121,056,000	1895	13,197	173,196,060
1873	5,183	228,499,900	1896	15,088	226,096,834
1874	5,830	155,239,000	1897	13,351	154,332,071
1875	7,740	201,000,000	1898	12,186	130,662,899
1876	9,092	191,177,000	1899	9,337	90,879,889
1877	8,872	190,669,936	1900	10,774	138,495,673
1878	10,478		1901	11,002	113,092,376
1879	6,658	98,149,053	1902	11,615	117,476,769

IMMIGRATION INTO THE UNITED STATES, 1820-1903

	1		
Total Alien			Total
Year. Passengers.	Year. Passengers.	YEAR.Immig'ants.	YEAR.Immig'ants.
1990 9 295	1842 104,565	1964 102 105	1885395,346
1821 9,127			1886 334,203
1822 6,911			1887 490,109
	1845 114,371		1888 546,889
1824 7,912			1889 444.427
	1684 154,416		
	1847 234,968		1890 455,302
	1848 226,527		1891 560,319
	1849 297,024		1892623,084
	1850 369,986		
	1851 379,466		1894 314,467
	1852 371,603		1895 279,948
	1853 368,645		1896 343,267
	1854 427,833		1897 230,832
1833 58,640			1898 229,299
	1856195,857		1899 311,715
1835 45,374			1900448,572
183676,242			1901 487,918
	1859 118,616		1902 648,743
1838 38,914		1881 669,431	1903 857,046
	1861 89,724		
184084,066		1883 603,322	
1841 80,289	1863 174,524	1884 518,592	1789 to18(est)250,000

RELIGIOUS DENOMINATIONS IN THE UNITED STATES

Members.	Denomination.	Members.
	Friends	118,306 143,000
3,605	Mormons	310,500
		1,745,588 $59,274$
1,491	Methodists	6,084,755 1,635,016
3,084	Protestant Episcopal	767 334
		385,038 $277,352$
106,194	Unitarians	71,000
	98,487 4,629,487 3,605 6,661 9,531,303 1,491 51,608 3,084 659,324 1,207,377 106,194	98,487 4,629,487 3,605 6,661 9,531,303 1,491 51,608 3,084 659,324 1,207,377 United Brethren

CREEDS IN THE WORLD

The following estimates, by Krose, are the latest that have been made by a competent authority, and refer to the religions of the world at the commencement of the twentieth century:—

Creeds.	No. of Followers.	Creeds.	No. of Followers.
Christianity Worship of Ancestors and Confucianism Hindooism Mohammedanism Buddhism.	253,000,000 210,000,000 202,000,000	Taoism Shintoism. Judaism Polytheism. Old Indian Religions Miscellaneous.	11,000,000

CHRISTIANITY

Churches.	Total.	Churches.	Total.
Roman Catholic Ch'rch Protestant Churches Orthodox Greek Ch'rch	167,000,000	Orthodox Russians Oriental Schism	109,000,000 6,500,000

Continents	Catholics	Protestants	Greek Orthodox Churches	Orthodox Russians		Total Christians
Europe						373,975,951
Asia						28,636 493
Africa						8,329,849
America	71,687,261	62,556,967				133,907,846
Australia and Ocean-						
ica	979,943	3,187,259				4,167 202
Total	264,502,922	166,627,109	109,147,272	2,173,371	6,554,913	549,017,341
Australia and Ocean- ica	979,943	1 1			<u></u>	4,167,20

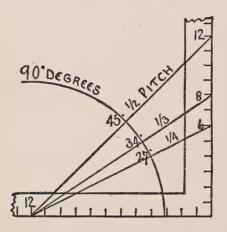
Out of the total population of the world, which amounts to 1,539 millions (according to Yuraschke), 35.7 per cent are Christians, 13.1 per cent Mohammedans, 0.7 per cent Jews, or, 762,102,000 are Monotheists against 776,000,000 who are Polytheists—i. e., nearly half of the population the world believe in one God.

CARPENTER'S RULES

ROOF FRAMING

Definition of Terms.—The "gable" is the triangular end of a common double-roofed building. By the "pitch" of a roof is meant the relation which the height of the ridge above the level of the roof-plates bears to the span, or the distance between the studs on which the roof rests. Thus a roof that is one-half as high as the width of the building is "half-pitch," one that is one-fourth as high as the width is "quarter-pitch," etc.

The following illustration from Hodgson's "Practical Treatise on the Steel Square," not only shows the most common pitches, but also gives the degrees:



"Most carpenters," says Mr. Hodgson, "know that half-pitch is 45 degrees, yet few know third-pitch is nearly 34, and quarter - pitch about 27 degrees.

"A building 24 feet wide (as the rafters come to the center) has a 12-foot run and half-pitch, the rise would also be 12 feet, and the length of the rafter would be 17 feet (the diagonal of 12). Length, cuts,

etc., could all be figured from the one illustration."

The Length of Rafters for the most common pitches can be found as follows from any given span:

```
If 1 pitch, multiply span by .559, or 7-12 nearly.

If \( \frac{1}{2} \) ... 6, or 3-5

If \( \frac{1}{2} \) ... ... 625, or \( \frac{1}{2} \) ...

If \( \frac{1}{2} \) ... ... ... ... 771, or 7-10

If \( \frac{1}{2} \) ... ... ... ... 8, or 4-5

If \( \frac{1}{2} \) ... ... ... 11, 2, or \( \frac{1}{2} \) ...

If \( \frac{1}{2} \) ... ... ... 12, or \( \frac{1}{2} \) ...
```

To lengths thus obtained must be added amount of projection of rafters at the eaves

As rafters must be purchased of even lengths, a few inches more or less on their lengths will make a difference to the pitch so slight that it cannot be detected by the eye.

Example.—To determine the length of rafters for a roof constructed one-half pitch, with a span of 24 feet—24×.71=17.04; or, practically, just 17 feet. A projection of one foot for eaves makes the length to be purchased 18 feet.

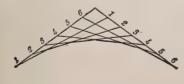
How to Find Bevels and Length of Rafters



How to Find the Length and Bevels of Rafters.

- 1. **Bevels.**—Place your steel square on a board (say the building is 40 feet long), with the corner 20 inches from the edge of the board one way and 7 inches the other, and mark it as shown in the above figure. The angle at c will be the bevel of the upper end, and the angle at d at the lower end of the rafter.
- 2. Length.—From a to b on the outer edge of the board is the length of the rafter. The 20 inches shows the 20 feet, or half the width of the building; the 7 inches the 7 foot rise. The distance from a to b, on the edge of the board, is 21 inches, two-twelfths and one-quarter of a twelfth (always use a square with inches on one side divided into twelfths), therefore this rafter will be 21 feet and $2\frac{1}{4}$ inches long.

How to Determine Curves for Brick and Stone Arches



Measure width required and draw the figure above indicated. If the points in the figures are equal on both sides, the curve will be an exact part of a circle.

To Find the Area of a Gable End

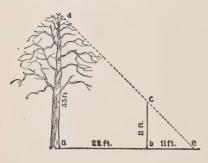
Multiply the width of the building by the height of the roof, and take one-half of the result. Or, if the roof is quarterpitch, find the area by multiplying the width of the roof by $\frac{1}{8}$ of itself.

To Find Number of Feet of Stock Boards to Cover a House

Multiply the distance around the house by the height of the post, and add the area of the two gable ends to the result.

How to Find the Height of a Tree

Measure off on the ground from the base of the tree the number of feet you desire your log to be in length (allowing



for the height of the stump), then measure back one-third of the distance and place there a pole as many feet long as this last measurement; let some one hold it from the height of prospective stump from the ground, then place your eye at the outer end of the line measured from the tree

and look over the pole towards the tree. The point where the eye strikes the tree is the height which will give you the log of the required length.

Example.—Suppose a log 33 feet long is wanted—measure off 33 feet out from the base of the tree, and then measure back again 11 feet. At this point (indicated by b in the cut), have some one hold an 11-foot pole at the height from the ground that the stump is to have; then put your eye at e, look over the top of the pole at c, and your eye will strike the tree at d, which will be 33 feet from a, the point where the tree is to be cut down.

-					
ALABAMA	1900	1890	CALIFORNIA-CODt.	1900	1890
Anniston city	9,695	9,998	Napa city	4,036	4,395
Avondale town	3,060	1,642	Nevada City town Oakland city		2,524
Bessemer town	6,358	96 179	Pasadana city	66, 960 9, 117 3, 871	48,682 4,882
Decatur city	3, 114	2, 765	Petaluma city	3, 871	3,692
Demopolis city	2,606	1,898	Pomona city	5, 526	3,634
Dothan town	3,275	247	Red Bluff city	2,750	2,608 1,821
Elifaula city	4,532	6 012	Redding city	2,946	1,821 1,904
Gadsden town	4, 282	2, 901	Riverside city	7, 973	4,683
Girard city	3,840		Sacramento city	29, 282	26, 386
Greenville city	3,162	2,806	Salinas city	8,304	2,339
Tanatt town	8,008	7,990	San Diego city	17 700	4, 012 16, 159
Mobile city	38, 469	31,076	San Francisco city	342, 782	298, 997
Montgomery city	30, 346	21,883	San Jose city	21,500	18,060
New Decatur city	4, 437	3,565	San Luis Obispo city	3,021	2,995
Phoenix city	4,240	3,700	Santa Ana city	1 033	3 628
Pratt City town	3, 485	1,946	Santa Barbara city	6,587	5, 864
Selma city	8,713	7,622	Santa Clara town	3,650	2,891
Anniston city Avondale town. Bessemer town. Brimingham city. Decatur city. Demopolis city Dothan town Eufaula city. Florence city Gadsden town Girard city. Greenville city. Huntsville town Lanett town Mobile city Montgomery city. New Decatur city Opelika city. Phoenix city Phoenix city Phoenix city Trati City town Schma city. Sheffield city Talladega city Troy city Tuscaloosa city. Union Springs town Woodlawn town.	3,333	2,731	Santa Cruz city	5,659	5,596
Troy oity	4,007	3 449	Santa Rosa city	6,007	5 220
Tuscaloosa city	5,094	4,215	Stockton city	17,506	14, 424
Union Springs town.	2,634	2,049	Vallejo city	7,965	6,343
Woodlawn town	2,848	1,506	Visalia city	3,085	2,885
ALASKA.			Nevada City town. Oakland city. Pasadena city Pesadena city Pomona city Red Bluff city. Redding city Redding city Redlands city Redlands city Sacramento city Salinas city San Bernardino city. San Bernardino city. San Diego city San Luis Obispo city San Luis Obispo city San La Clara town Santa Ana city Santa Ana city Santa Clara town Santa Clara town Santa Rosa city Santa Rosa city Stockton city Visilia city. Watsonville city Woodland city COLORADO.	342, 782 21, 500 3, 021 3, 879 4, 933 6, 587 3, 650 5, 659 3, 057 6, 673 17, 506 7, 965 3, 528 2, 886	3,069
Nome city	12,488		COLORADO.		
Nome city	3, 117		COLORADO.		
ARIZONA.			Aspen city Boulder city Canyon City Central City town. Colorado City town. Colorado Springs city Cripple Creek town Denver city Durango city. Florence city. Fort Collins city Grand Junction city. Greeley city Idaho Springs town La Junta town Leadville city Pueblo city. Salida city Trindad city Victor town (Teller cd	3,303	5, 108
	0.004	050	Boulder city	6, 150	3,330
Jerome town	2,801 5,544	250 3 152	Central City town	3,775	2,820
Prescott city	3, 559	1,759	Colorado City town	2, 914	1,788
Tucson city	7,531	5, 150	Colorado Springs city	21,085	11,140
			Cripple Creek town	10, 147	100 710
ARKANSAS.			Durango city	3 317	2 726
Arkadelphia town	2,739	2,455	Florence city	3,728	2,120
Camden city	2,840	2,571	Fort Collins city	3,053	2,011
Eureka Springs city.	3,572	3,706	Grand Junction city	3,503	2,030
Fort Smith city	11 587	11, 311	Idaho Springs town	9 502	2, 393
Helena city	5,550	5, 189	La Junta town	2,513	1,439
Hot Springs city	9,973	8,086	Leadville city	12, 455	10,384
Jonesboro city	4,508	2,065	Salida city	28, 157	24,558
Arkadelphia town Camden city. Eureka Springs city Fayetteville city Fort Smith city Helena city Hot Springs city Jonesboro city Little Rock city Mena town Newport town Paragould city Pine Bluff city Texarkana city Van Buren city	3, 423	20,014	Trinidad city	5, 722	5, 523
Newport town	2,866	1,571	Victor town (Teller cd	4,986	,,,,,
Paragould city	3,324	1,666			
Pine Bluff city	11,496	9,952	COMMECTICUT.		1
Van Buren city	2,573	2, 291	Ansonia city	12 681	
Tall Datoll City !!!!!	2,010	, 5,501	Berlin town	3, 448	2,600
CALIFORNIA.			Bethel borough	2,561	2,335
Alamada oity	16 464	11 165	Branford town	5,706	4,460
Bakersfield city	4, 836	2,626	Bristol borough	6 268	40,000
Benicia city	2,751	2,361	Canton town	2,678	2,500
Berkeley city	13, 214	5, 101	Danbury city	16,537	16,552
Eureka city	2,640	2,894	Danielson borough	2,823	0 070
Fresno cityl.	12, 470	10.818	Derby city	7,930	2,270
Grass Valley city	4,719		East Hartford town	6,406	4,455
Hanford city	2,929	942	East Windsor town	3, 158	2,890
Marysville city	3 407	3 991	Esser town	6,699	7,199
Alameda city. Bakersfield city Benicia city Benicia city Berkeley city Chico city Eureka city Fresno city! Grass Valley city Hanford city Los Angeles city Marysville city	0,471	0,001	Ansonia city Berlin town Bethel borough Branford town Bridgeport city Bristol borough Canton town Danbury city Danielson borough Derby city East Hartford town East Windsor town Enfield town Essex town	2,030	2,000

SAFE METHODS

Manchester town				1		
Farmington town 3, 331 Glastonbury town 4, 260 3, 467 Greenwich town 12, 172 10, 181 Gainesville city 23, 229 17, 206 Gainesville city 25, 229 17, 206 Gainesville city 25, 229 17, 206 Gainesville city 25, 229 17, 206 Gainesville city 26, 229 17, 206 Gainesville city 26, 229 17, 206 Gainesville city 28, 229 17, 206 Gainesville city 38, 308 38	connecticut—cont	1900	1890	FLORIDA.	1900	1890
Farmington town 3, 331 Glastonbury town 4, 260 3, 467 Greenwich town 12, 172 10, 181 Gainesville city 23, 229 17, 206 Gainesville city 25, 229 17, 206 Gainesville city 25, 229 17, 206 Gainesville city 25, 229 17, 206 Gainesville city 26, 229 17, 206 Gainesville city 26, 229 17, 206 Gainesville city 28, 229 17, 206 Gainesville city 38, 308 38	Fairfield town	4, 489	3, 868	Apalachicola city	3,077	2,727
Greenwich town 12, 172 10, 131 348 3490 3, 113 Key West city 17, 141 18, 08 18, 090 19, 141 19	Farmington town	2 221	3,179	Fernandina city	3, 245	2,803
Guilford town	Glastonbury town	4, 260	3, 457	Gainesville city	3,633 1	2,790
Guilford town	Greenwich town	12, 172	10, 131			17, 201
Guilford town			3, 113	Key West city	17, 114	18,080
Milford town	Groton town	5,962	5,539	Lake City town	4,013	2,020
Milford town	Guilford town	2,785	2,780	Ocala city	3,380	2,904
Milford town	Hamden town	4,626	3,882	Palatka city	3,301	3,039
Milford town	Hartiord city	79,850	53, 230	Pensacola city	17,747	11,750
Milford town	Litchneid town	3, 214	3,304	St. Augustine city	4,272	4,742
Milford town	Manchester town	10,601	8,222	Tallahassee city	2,981	2,934
Milford town	Middletown city	24, 296	21,652	Tampa city	15,839	5,532
New Canaan town 2, 963 2, 761 Americus city 7, 7674 6, 86 New Hartford town 3, 424 3, 160 New Hartford town 4, 8027 81, 298 New London city 17, 548 13, 757 Newtown town 3, 276 3, 539 New Millord town 4, 804 3, 917 Newtown town 3, 276 3, 539 Nerwalk city 6, 125 Norwalk city 17, 251 16, 156 Cartersville city 9, 918 Prusmick	Milford town	9,589	9,013			
New Canaan town 2, 965	Noveetwels because	3,783	3,811	GEORGIA.		
New Canaan town	Naw Britain oity	10, 541	16 510	Albany city	4,606	4,008
Norwich city	Now Concentown	0 000		Americus city	7,674	6,398
Norwich city	New Hertford town	2,900	2,701	Athens city	10, 245	8,639
Norwich city	New Harriord town	100 007	01 000	Atlanta city	89, 872	65, 533
Norwich city	New London city	17 549	19 757	Augusta city	39, 441	33, 300
Norwich city	New Milford town	17,040	2 017	Bainbridge town	2,641	1,668
Norwich city	Newtown town	2 276	2 520	Barnesville town	3,036	1,839
Norwich city	Norwalk city	6 125	0,000	Brunswick city	9,081	8, 459
Stratior town 3, 657 2, 668 Suffield town 3, 521 2, 668 Thompson town 6, 442 5, 580 Thorington borough 8, 360 4, 228 Wallingford borough 6, 6737 4, 230 Waterford town 2, 904 2, 661 Waterford town 3, 186 1, 930 West Hartford town 3, 186 1, 930 West Hartford town 4, 017 3, 715 West Have borough 5, 247 Westport town 2, 663 7, 2, 271 Westport town 3, 186 1, 930 West Have borough 5, 247 Williamantic city 3, 361 4, 295 Windsor Locks town 3, 662 2, 758 Windsor Locks town 3, 622 2, 758 Winsted borough 6, 804 4, 846 DELAWARE DELAWARE 1, 580 2, 560 2, 565 Newcastle city 3, 380 6, 20 District of Columbia	Norwich city	17 951	16 156	Cartersville city	3,135	3, 171
Stratior town 3, 657 2, 668 Suffield town 3, 521 2, 668 Thompson town 6, 442 5, 580 Thorington borough 8, 360 4, 228 Wallingford borough 6, 6737 4, 230 Waterford town 2, 904 2, 661 Waterford town 3, 186 1, 930 West Hartford town 3, 186 1, 930 West Hartford town 4, 017 3, 715 West Have borough 5, 247 Westport town 2, 663 7, 2, 271 Westport town 3, 186 1, 930 West Have borough 5, 247 Williamantic city 3, 361 4, 295 Windsor Locks town 3, 662 2, 758 Windsor Locks town 3, 622 2, 758 Winsted borough 6, 804 4, 846 DELAWARE DELAWARE 1, 580 2, 560 2, 565 Newcastle city 3, 380 6, 20 District of Columbia	Plainfield town	4 821	4 582	Cedartown town	2,020	1,625
Stratior town 3, 657 2, 668 Suffield town 3, 521 2, 668 Thompson town 6, 442 5, 580 Thorington borough 8, 360 4, 228 Wallingford borough 6, 6737 4, 230 Waterford town 2, 904 2, 661 Waterford town 3, 186 1, 930 West Hartford town 3, 186 1, 930 West Hartford town 4, 017 3, 715 West Have borough 5, 247 Westport town 2, 663 7, 2, 271 Westport town 3, 186 1, 930 West Have borough 5, 247 Williamantic city 3, 361 4, 295 Windsor Locks town 3, 662 2, 758 Windsor Locks town 3, 622 2, 758 Winsted borough 6, 804 4, 846 DELAWARE DELAWARE 1, 580 2, 560 2, 565 Newcastle city 3, 380 6, 20 District of Columbia	Plymouth town	2 828	2 147	Columbus city	17,614	17,303
Stratior town 3, 657 2, 668 Suffield town 3, 521 2, 668 Thompson town 6, 442 5, 580 Thorington borough 8, 360 4, 228 Wallingford borough 6, 6737 4, 230 Waterford town 2, 904 2, 661 Waterford town 3, 186 1, 930 West Hartford town 3, 186 1, 930 West Hartford town 4, 017 3, 715 West Have borough 5, 247 Westport town 2, 663 7, 2, 271 Westport town 3, 186 1, 930 West Have borough 5, 247 Williamantic city 3, 361 4, 295 Windsor Locks town 3, 662 2, 758 Windsor Locks town 3, 622 2, 758 Winsted borough 6, 804 4, 846 DELAWARE DELAWARE 1, 580 2, 560 2, 565 Newcastle city 3, 380 6, 20 District of Columbia	Portland town	3, 856	4, 687	Cordele town	3,473	1.578
Stratior town 3, 657 2, 668 Suffield town 3, 521 2, 668 Thompson town 6, 442 5, 580 Thorington borough 8, 360 4, 228 Wallingford borough 6, 6737 4, 230 Waterford town 2, 904 2, 661 Waterford town 3, 186 1, 930 West Hartford town 3, 186 1, 930 West Hartford town 4, 017 3, 715 West Have borough 5, 247 Westport town 2, 663 7, 2, 271 Westport town 3, 186 1, 930 West Have borough 5, 247 Williamantic city 3, 361 4, 295 Windsor Locks town 3, 662 2, 758 Windsor Locks town 3, 622 2, 758 Winsted borough 6, 804 4, 846 DELAWARE DELAWARE 1, 580 2, 560 2, 565 Newcastle city 3, 380 6, 20 District of Columbia	Preston town	2.807	2, 555	Cuthbert town	2,641	2,328
Stratior town 3, 657 2, 668 Suffield town 3, 521 2, 668 Thompson town 6, 442 5, 580 Thorington borough 8, 360 4, 228 Wallingford borough 6, 6737 4, 230 Waterford town 2, 904 2, 661 Waterford town 3, 186 1, 930 West Hartford town 3, 186 1, 930 West Hartford town 4, 017 3, 715 West Have borough 5, 247 Westport town 2, 663 7, 2, 271 Westport town 3, 186 1, 930 West Have borough 5, 247 Williamantic city 3, 361 4, 295 Windsor Locks town 3, 662 2, 758 Windsor Locks town 3, 622 2, 758 Winsted borough 6, 804 4, 846 DELAWARE DELAWARE 1, 580 2, 560 2, 565 Newcastle city 3, 380 6, 20 District of Columbia	Putnam city	6, 667	-,	Dalton city	4,315	3,046
Stratior town 3, 657 2, 668 Suffield town 3, 521 2, 668 Thompson town 6, 442 5, 580 Thorington borough 8, 360 4, 228 Wallingford borough 6, 6737 4, 230 Waterford town 2, 904 2, 661 Waterford town 3, 186 1, 930 West Hartford town 3, 186 1, 930 West Hartford town 4, 017 3, 715 West Have borough 5, 247 Westport town 2, 663 7, 2, 271 Westport town 3, 186 1, 930 West Have borough 5, 247 Williamantic city 3, 361 4, 295 Windsor Locks town 3, 662 2, 758 Windsor Locks town 3, 622 2, 758 Winsted borough 6, 804 4, 846 DELAWARE DELAWARE 1, 580 2, 560 2, 565 Newcastle city 3, 380 6, 20 District of Columbia	Ridgefield town	2,626	2, 235	Dawson town	2,926	2,284
Stratior town 3, 657 2, 668 Suffield town 3, 521 2, 668 Thompson town 6, 442 5, 580 Thorington borough 8, 360 4, 228 Wallingford borough 6, 6737 4, 230 Waterford town 2, 904 2, 661 Waterford town 3, 186 1, 930 West Hartford town 3, 186 1, 930 West Hartford town 4, 017 3, 715 West Have borough 5, 247 Westport town 2, 663 7, 2, 271 Westport town 3, 186 1, 930 West Have borough 5, 247 Williamantic city 3, 361 4, 295 Windsor Locks town 3, 662 2, 758 Windsor Locks town 3, 622 2, 758 Winsted borough 6, 804 4, 846 DELAWARE DELAWARE 1, 580 2, 560 2, 565 Newcastle city 3, 380 6, 20 District of Columbia	Rockville city	7, 287	7,772	Dublin city	2,987	862
Stratior town 3, 657 2, 668 Suffield town 3, 521 2, 668 Thompson town 6, 442 5, 580 Thorington borough 8, 360 4, 228 Wallingford borough 6, 6737 4, 230 Waterford town 2, 904 2, 661 Waterford town 3, 186 1, 930 West Hartford town 3, 186 1, 930 West Hartford town 4, 017 3, 715 West Have borough 5, 247 Westport town 2, 663 7, 2, 271 Westport town 3, 186 1, 930 West Have borough 5, 247 Williamantic city 3, 361 4, 295 Windsor Locks town 3, 662 2, 758 Windsor Locks town 3, 622 2, 758 Winsted borough 6, 804 4, 846 DELAWARE DELAWARE 1, 580 2, 560 2, 565 Newcastle city 3, 380 6, 20 District of Columbia	Salisbury town	3,489	3,420	Elberton city	3,834	1,5/2
Stratior town 3, 657 2, 668 Suffield town 3, 521 2, 668 Thompson town 6, 442 5, 580 Thorington borough 8, 360 4, 228 Wallingford borough 6, 6737 4, 230 Waterford town 2, 904 2, 661 Waterford town 3, 186 1, 930 West Hartford town 3, 186 1, 930 West Hartford town 4, 017 3, 715 West Have borough 5, 247 Westport town 2, 663 7, 2, 271 Westport town 3, 186 1, 930 West Have borough 5, 247 Williamantic city 3, 361 4, 295 Windsor Locks town 3, 662 2, 758 Windsor Locks town 3, 622 2, 758 Winsted borough 6, 804 4, 846 DELAWARE DELAWARE 1, 580 2, 560 2, 565 Newcastle city 3, 380 6, 20 District of Columbia	Seymour town	3,541	3,300	Gainesville city	4,382	3,202
Stratior town 3, 657 2, 668 Suffield town 3, 521 2, 668 Thompson town 6, 442 5, 580 Thorington borough 8, 360 4, 228 Wallingford borough 6, 6737 4, 230 Waterford town 2, 904 2, 661 Waterford town 3, 186 1, 930 West Hartford town 3, 186 1, 930 West Hartford town 4, 017 3, 715 West Have borough 5, 247 Westport town 2, 663 7, 2, 271 Westport town 3, 186 1, 930 West Have borough 5, 247 Williamantic city 3, 361 4, 295 Windsor Locks town 3, 662 2, 758 Windsor Locks town 3, 622 2, 758 Winsted borough 6, 804 4, 846 DELAWARE DELAWARE 1, 580 2, 560 2, 565 Newcastle city 3, 380 6, 20 District of Columbia	Shelton borough	2,837	1,952	Grimin City	0,807	2,000
Stratior town 3, 657 2, 668 Suffield town 3, 521 2, 668 Thompson town 6, 442 5, 580 Thorington borough 8, 360 4, 228 Wallingford borough 6, 6737 4, 230 Waterford town 2, 904 2, 661 Waterford town 3, 186 1, 930 West Hartford town 3, 186 1, 930 West Hartford town 4, 017 3, 715 West Have borough 5, 247 Westport town 2, 663 7, 2, 271 Westport town 3, 186 1, 930 West Have borough 5, 247 Williamantic city 3, 361 4, 295 Windsor Locks town 3, 662 2, 758 Windsor Locks town 3, 622 2, 758 Winsted borough 6, 804 4, 846 DELAWARE DELAWARE 1, 580 2, 560 2, 565 Newcastle city 3, 380 6, 20 District of Columbia	Southington borough	3,411		Moon oity	9,274	99 746
Stratiord town	South Norwalk city	6,591		Manietta eity	4 446	2 224
Stratior town 3, 657 2, 668 Suffield town 3, 521 2, 668 Thompson town 6, 442 5, 580 Thorington borough 8, 360 4, 228 Wallingford borough 6, 6737 4, 230 Waterford town 2, 904 2, 661 Waterford town 3, 186 1, 930 West Hartford town 3, 186 1, 930 West Hartford town 4, 017 3, 715 West Have borough 5, 247 Westport town 2, 663 7, 2, 271 Westport town 3, 186 1, 930 West Have borough 5, 247 Williamantic city 3, 361 4, 295 Windsor Locks town 3, 662 2, 758 Windsor Locks town 3, 622 2, 758 Winsted borough 6, 804 4, 846 DELAWARE DELAWARE 1, 580 2, 560 2, 565 Newcastle city 3, 380 6, 20 District of Columbia	Stafford town	4, 297	4,535	Milladravilla oity	4 210	3,322
Stratior town 3, 657 2, 668 Suffield town 3, 521 2, 668 Thompson town 6, 442 5, 580 Thorington borough 8, 360 4, 228 Wallingford borough 6, 6737 4, 230 Waterford town 2, 904 2, 661 Waterford town 3, 186 1, 930 West Hartford town 3, 186 1, 930 West Hartford town 4, 017 3, 715 West Have borough 5, 247 Westport town 2, 663 7, 2, 271 Westport town 3, 186 1, 930 West Have borough 5, 247 Williamantic city 3, 361 4, 295 Windsor Locks town 3, 662 2, 758 Windsor Locks town 3, 622 2, 758 Winsted borough 6, 804 4, 846 DELAWARE DELAWARE 1, 580 2, 560 2, 565 Newcastle city 3, 380 6, 20 District of Columbia	Stamford city	15, 997		Nownen city	3 654	2 850
Sumanah city			1,102	Rome city	7, 291	6, 957
Wallingford borough. 6,737 4,230 4,230 Washington village 3,300 2,61 Waterbury city 46,859 28,646 Waycross town 5,919 3,300 2,61 Waterford town 2,904 west Hartford town 3,186 1,930 1,930 HAWAII. HAWAII. <td< td=""><td>Cure ald Assure</td><td>3,657</td><td>2,608</td><td>Savannah city</td><td>54, 244</td><td> 43.189</td></td<>	Cure ald Assure	3,657	2,608	Savannah city	54, 244	43.189
Wallingford borough. 6,737 4,230 4,230 Washington village 3,300 2,618 Waterbury city 46,859 28,646 Waycross town 5,919 3,300 2,61 Waterford town 3,106 2,323 Waycross town 4,017 3,715 HAWAII. HAWAII. HAWAII. Honolulu city 39,306 22,60 22,60 4,017 3,715 IDAHO. Westerfort own 3,614 2,954 4,846 4,946 4,046 4,046 4,046 4,046 4,046 4,017 4,846 4,846 4,846 4,846 4,846 4,017 4,846 4,017 4,846 4,010	Thomaston town	3,521	3, 169	Summerville town	3, 245	
Wallingford borough. 6,737 4,230 4,230 Washington village 3,300 2,618 Waterbury city 46,859 28,646 Waycross town 5,919 3,300 2,61 Waterford town 3,106 2,323 Waycross town 4,017 3,715 HAWAII. HAWAII. HAWAII. Honolulu city 39,306 22,60 22,60 4,017 3,715 IDAHO. Westerfort own 3,614 2,954 4,846 4,946 4,046 4,046 4,046 4,046 4,046 4,017 4,846 4,846 4,846 4,846 4,846 4,017 4,846 4,017 4,846 4,010	Thomason town	3, 300	5,276	Thomasville town	5,322	5,514
Wallingford borough. 6,737 4,230 4,230 Washington village 3,300 2,618 Waterbury city 46,859 28,646 Waycross town 5,919 3,300 2,61 Waterford town 3,106 2,323 Waycross town 4,017 3,715 HAWAII. HAWAII. HAWAII. Honolulu city 39,306 22,60 22,60 4,017 3,715 IDAHO. Westerfort own 3,614 2,954 4,846 4,946 4,046 4,046 4,046 4,046 4,046 4,017 4,846 4,846 4,846 4,846 4,846 4,017 4,846 4,017 4,846 4,010	Torrington borough	0,442	0,000	Valdosta city	5,613	2,854
Delaware Delaware Dover town 3,329 3,061 Batavia city 24,417 19,	Wallingford horough	6 797	4,200	Washington village	3,300	2,631
Delaware Delaware Dover town 3,329 3,061 Batavia city 24,417 19,	Waterhury city	45 850	28 646	Waveross town	5,919	3,364
Delaware Delaware Dover town 3,329 3,061 Batavia city 24,417 19,	Waterford town	2 004	20,040			1
Delaware Delaware Dover town 3,329 3,061 Batavia city 24,417 19,	Watertown town	3,100	2,303	HAWAII.		
Delaware Delaware Dover town 3,329 3,061 Batavia city 24,417 19,	West Hartford town	3 186	1,930	Honolulu city	39, 306	22; 907
Delaware Delaware Dover town 3,329 3,061 Batavia city 24,417 19,	West Haven borough.	5, 247		Honorara City	00,000	,
Delaware Delaware Dover town 3,329 3,061 Batavia city 24,417 19,	Westport town	4,017	2 715	IDAHO		1
Delaware Delaware Dover town 3,329 3,061 Batavia city 24,417 19,	Wethersfield town	2,637	2,271		F 057	0 211
Delaware Delaware Dover town 3,329 3,061 Batavia city 24,417 19,	Willimantic city	8,937	8,648	Boise city	5,907	2,311
DELAWARE Dover town 3,329 3,061 Batavia city 24,618 2,47 19,	Windsor town	3, 614	2,954	Pocatello city	4,040	
DELAWARE Dover town 3,329 3,061 Batavia city 24,618 2,47 19,	Windsor Locks town .	3,062	2,758			
Delaware Delaware Dover town 3,329 3,061 Batavia city 24,417 19,	Winsted borough	6,804	4,846	ILLINOIS.	1	
Delaware Delaware Dover town 3,329 3,061 Batavia city 24,417 19,		1		Alton city	14,210	10,294
Dover town 3,329 3,061 Milford town 2,500 2,565 Beardstown city 3,871 3, Wilmington city 76,508 61,431 Beleville city 17,434 15, Belville city 6,937 3, Bloomington city 23,226 20, DISTRICT OF COLUMBIA.	DELAWARE.			Anna city	2,618	2,295
Milford town 2,500 2,565				Aurora city	24, 147	1 19,688
Milford town	Dover town	3,329	3,061	Batavia city	3,871	3,543
Newcastle city	Milliord town	2.500	2,565	Beardstown city	4,827	4,226
76,508 61,431 Belvidere city 6,937 3, Bleomington city 23,286 20, Bleomington city 23,286 20, Blue Island village 6,114 3,	Newcastle city	3,380	4,010	Belleville city	17,484	1 10.301
Bloomington city 23,286 23,286 23,286 24,286	wilmington city	76,508	61,431	Belvidere city	6,937	3,867
Blue Island willage 6,114 8, Braidwood city 3,279 4, Braidwood city 12,566 10,				Bloomington city	23,286	20,484
Washington city 278, 718 230, 392 Braidwood city 3, 279 4, Cairo city 12, 566 10.	DISTRICT OF COLUMBIA.			Blue Island village	6,114	3,329
12,000 10,	Washington site	070 710	000 000	Braidwood city	3,279	4,641 10,324
	City	210,110	200, 092	Cairo city	1 12,000	10,024

ILLINOIS —cont	1900	1890	ILLINOIS—cont	1900	1890
Canton city Carbondale city Carlinville city Carmi city Centralia city Champaign city Charleston city Chester city	6,564	5, 604	Murphysboro city	6,463	3,880 2,216 3,459
Carbondale city	3,318	5,604 2,382	Mapervine City	2,629 3,795	2,216
Carlinville city	3,502	3, 293	Normal town	3,795	3,459
Carmi city	2,939	2,785	Olney city	4,260	3,831
Centralia city	6,721	4,763	Ottawa city	10,588	9,980
Champaign city	9,098	5,839 4,135 2,708	Pana city	5,530	5,077
Charleston City	5,488	4,135	Paris City	6, 105 3, 036	4,996 2,187
Chester city Chicago city	1 608 575	1,099,850	Pekin city	8,420	6,347
Chicago Heights villag	5,100				41,024
Clinton city	1 459	2,598	Peru city	6,863	5,550
Clinton city	2,607	1,672	Petersburg city	2,807	2,342
Coal City Collinsville city Danville city Decatur city	4,021	3,498	Pontiac city	4,266	2,784
Danville city	16,354 20,754	11, 491	Princeton city	4,023	3,396
Decatur city	20,754	16,841	Quincy city	36, 252	31,494 23,584
Divon city	5,904	2,579	Peru city Peru city Petersburg city Pontiac city Princeton city Quincy city Rockford city Rock Island city St. Charles city Sandwich city	31,051 19,493	13,634
Duquoin city	7,917	4 059	St Charles city	2,675	1,690
East St. Louis city	29 655	15, 169	Sandwich city	2,520	2,516
Edwardsville city	4, 353 29, 655 4, 157	3,561	Savanna city	3,325	3.497
Effingham city	3,774	3,260	Shelby ville city	3,546	3,162
Elgin city	3,774	17,823	Sparta city	3,546 2,941 34,159	1,979 24,963
Evanston city	19,259		Springfield city	34, 159	24,963
Freeport city	13,258	10,189	Savanna city Savanna city Shelbyville city Sparta city Springfield city Spring Valley city Stampton city	6,214 2,786	0,001
Colone city	2,685 5,005	2,099	Staunton city Sterling city	6 200	5,824
Galashurg oity	18,607	5, 635 15, 264	Streator city	14 079	11,414
Decatur city Dekalb city Dixon city. Duquoin city. East St. Louis city. Edwardsville city. Effingham city Elgin city Evanston city Freeport city Fulton city. Galeaburg city. Galeaburg city. Galex town	2,682	2, 409	Sycamore city	2,786 6,309 14,079 3,653	2, 987 2, 829
Genesee city	2 356	3, 182	Sycamore city Taylorville city		
Granite city	3, 122		Toluca city	2,629	
Greenville city	2,504	1,868	Tuscola city	2,569	1,897
Granite city Greenville city Harlem village Harvard city	4,085	1 000	Urbana city Vandalia city Watseka city	5,728	1,897 3,511 2,144 2,017 4,915
Harvard city	2,602	1.90/	Watsale aity	2,000	2,144
Harvey city	5,395 3,268	2,525	Waukegan city West Hammond villa	0.406	4,915
Highland Park city	2 806	2,163	West Hammond villa	9 935	3,310
Hinsdale village	2,578	1,584	Woodstock city		1,683
Hoopeston city	3,823	1,911		1 -/	,
Jacksonville city	15,078	12, 935 3, 207 23, 264	INDIANA.		
Jerseyville city	3,517	3,207	43	1	
Vonlet City	29,353	9,025	Alexandria city	7,221	715
Kamanee city	8 389	4,569	Attica city	20,178	10,741 2,320
Lagrange village	3, 969	2,314	Attica city. Auburn city. Aurora city.	3,396	2,320
Lasalle city	10, 446	9,855	Aurora city	3,396 3,645 6,115	3, 929
Lewistown city	2,504	2, 166 6, 725	Dealord City	1 0,110	3,351
Lincoln city	8,962	6,725	Bloomington hits		
Litchfield city	5,918	5,811	Bluffton city	4,479	3,589
Mocomboity	2,659	2,449	Boonville town	2,849	1,881
Marion city	9,570	4,052 1,338	Clinton city	7,786	5,905
Marseilles city	2,559	2,210	Columbia City	2,910	1,365 3,027
Mattoon city	9, 622	6,833	Columbus city	8, 130	6,719
Maywood village	4,532		Connersville city	6,836	4,548
Melrose Park village	2,592		Crawfordsville city	6,649	6,089
Mendota city	3,736	3,542	Decatur city	4,142	3,142
Metropolis city	4,069	3,573	Dunkirk city	3,187	1,024
Moline city	2,545	3,573 2,316 12,000	Elkhart city	3,411	1,255
Monmouth city	7 460	5,936	Elwood city	10, 184	11,360
Morris city	4, 273	3,653	Evansville city	59 007	2,284 50,756
Mound City	2,705	0,000	Fairmount town	3, 205	1,462
Mt. Carmel city	4,311	3,376	Fort Wayne city	45, 115	35,393
Harvey city Havena city Havena city Hishale village Hoopeston city Jacksonville city Jerseyville city Joliet city Kankakee city Kankakee city Lagrange village Lasalle city Litchfield city Litchfield city Litchfield city Litchfield city Marion city Marion city Marseilles city Matono city Matono city Matono city Matono city Moline city Monmouth city Monmouth city Monmouth city Monmouth city Monmouth city Mond city Mound city Mound city Mound city Mound city Mot Carmel city Mt. Olive village Mt. Vernon city	2,935	1,986	Bluffton city Boonville town Brazil city. Clinton city Columbia City. Columbia City. Connersville city. Crawfordsville city. Decatur city. Dunkirk city East Chicago city Elkhart city. Elwood city Evansville city Fairmount town Fort Wayne city. Frankfort city.	7,100	5, 919
Mt. vernon city	5,216	3, 233	Franklin city	4,005	3,781
			. Turner as	manufacto.	

SAFE METHODS

					
INDIANA-cont	1900	1890	IOWA.	1900	1890
Garrett city	3,910	2,767	Albia city	2,889	2,359
Gas City	3,622	145		2,911	2,068
Goshen city	7,810	6,033	Anamoso city	2,911 2,891	2,078
Greencastle city	3,661	4,390	Atlantic city	5,046 3,283	4,351
Greenfield city	4,489	3,100	Belle Plaine city	3,283	2,623
Greensburg city	5,034	3,596	Boone city	8,880	6,520
Hammond city	12,376	5, 428	Burlington city	23, 201	22,565
Hartford City Huntingburg city	5, 912	2, 287 3, 167	Carroll city	2,882	2,448 3,459
Huntingburg city	2,527	3, 167	Cedar Falls city	5,319	3, 459
Huntington city	9,491	7,328	Cedar Rapids city	25,656	- 18,020
Indianapolis city	169, 164	105, 436	Centerville city	5,256	3,668
Jeffersonville city	10,774	10,666	Chariton city	3,989	3, 122
Kendallville city	3,354	2,960	Charles City	4,227	2,802
Kokomo city	10,609	8, 261	Cherokee city	3,865	3,441
Lafayette city	18, 116	2,960 8,261 16,243	Cherokee city Clarinda city Clinton city	3,276	3, 262
Laporte city	7, 113	7, 120	Clinton city	22, 698 25, 802	13,619
Lawrenceburg city	4,326	4,284	Council Bluns city	25, 802	21,474
Lebanon city	4,465	3,682	Cresco city	2,806	2,018
Linton city	3,071	958	Creston city	2, 806 7, 752 35, 254	7, 200
Logansport city	16, 204	13,328	Davenport city	35, 254	26,872
Madison city	7,835 17,337	8,936	Decorah city	3,246	2,801 1,782
Marion city	17,337	8,769	Denison city	2,771	1,782
Martinsville city	4,038	2,680	Des Moines city	62, 139	50,093
Michigan City	14,850	10,776	Dubuque city	36, 297	30,311
Mishawaka city	5,560	3,371	Eaglegrove city	3,557	1,881
Montpelier city	3,405	808	Estherville city	3, 237	1,475
Mt. Vernon city	5, 132	4,705	Fairfield city	4,689	3,391
Muncie city	20,942	11,345	Fort Dodge city	12, 162	4,871
New Albany city	20,628	21,059	Fort Madison city	9,278	7,901
New Castle town	3,406	2,697	Glenwood city	3,040	1,890
Noblesville city	4, 792	3,054	Grinnell city	3,860	3, 332
North Vernon city	2,823	2,012	Hampton city	2,727	2,067
Peru city	8, 463	7,028	Independence city	3,656	3, 163
Plymouth city	3,656	2,723	Indianola city	3,261	2,254
Portland city	4,798	3,725	Iowa City	7.987	7,016
Princeton city	6,041 18,226	3,076	Iowa Falls city	2,840	1,796
Richmond city	18, 226	16,608	Jefferson city	2,601	1,875
Rochester town	3, 421	2,467	Keokuk city	14,641	14, 101
Rockport town	2,882	2,314	Knoxville city	3,131	2,632
Rushville city	4,541	3, 475	Lake City	2,703	1,160
Seymour city Shelbyville city	6,445	5,337	Le Mars city	4,146	4,036
Shelbyville City	7, 169 35, 999	5, 451	Manchester city	2,887 3,777	2,344
South Bend city	35, 999	21,819	Maquoketa city	3,777	3,077
Sullivan town	3,118	2,222	Marion city	4, 102 11, 544	3, 094 8, 914
Tell City	2,680	2,094	Marshalltown city	6,746	4,007
Terre Haute city Tipton city	36,673	30, 217	Mason City Missouri Valley city	4,010	2,797
Thion City	3,764 2,716 6,280	2,697	Mt Placeant city	4,010	3, 997
Union City Valparaiso city	6 280	2,681 5,090	Mt. Pleasant city Muscatine city	14, 073	11, 454
Vincennes city	10, 249	8,853	Newton city	3,682	2,564
Wabash city	8,618	5,105	Oelwein city	5, 142	830
Warsaw city	3,987	3,574	Osage city	9 794	1,913
Washington city	8,551	6,064	Osage city Osceola city	2,734 2,505	2,120
Whiting town		1,408	Oskaloosa city	9, 212	6,558
Winchester city	3, 983 3, 705	3,014	Ottumwa city	18, 197	14,001
	0, 100	0,014	Pella city	2,623	2,408
INDIAN TERRITORY.			Perry city	3,986	2,880
			Perry city Red Oak city	4,355	3,321
Ardmore town	5,681		Shenandoah city	3,573	2,440
Chickasha town			Sioux City	33, 111	2,440 37,806
Coalgate town	2,614		Spencer city	3, 095	1,813
Durant town			Tama city		
Muscogee town		• • • • • • • • • • • • • • • • • • • •	Tipton city	2,513	1,599
South McAlester town	3,479		Tipton city	2,649 2,513 3,499	2,865
	. ,		*******************************	03.280	2,000

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iowa-cont.	1900	1890	KENTUCKY-cont.	1900	1890
Washington city Waterloo city Waverly city Webster City What Cheer city Winterset city.	4, 255 12, 580 3, 177	3,235	Louisville city	204, 731	161, 129
Waterloo city	12,580	6, 674 2, 346 2, 829	Ludlow town	3,334	2, 469 2, 212
Waverly city	3, 177	2,346	Madisonville city	3,628	2,212
What Cheer city	4, 613 2, 746	2,829	Mayfield city	4,081	2,909
Winterset city	3,039	3, 246 2, 281	Mayfield city	6,423 4,162	5,358
***************************************	5,005		MA Charling site	9,102	
KANSAS.			Mt. Sterling city Newport city	3,561 28,301	3,629 24,918
1 4 3 13 24			Owensboro city	13, 189	9,837
Abliene city	3,507	3,547	Paducan city	19.446	12,797
Arkenses City	0,878	4,732 8,347	Paris city	4 603	4,218
Atchison city	15, 722	13, 963	Princeton town	2,556	1,857
Chanute city	4,208	2,826	Princeton town. Richmond city Russellville city.	4,653	5,073
Cherryvale city	3,472	2,104	Shelbyville city	2,591 3,016	2,253
Clay Center city	3,069	2,802 2,282	Somerset city	3,384	2,625
Concording city	4,953	2,282	Winchester city	5,964	4,519
Eldorado city	3,466	3 330			1
Emporia city	8, 223	7,551	LOUISIANA.		[
Fort Scott city	10, 322	3, 184 3, 339 7, 551 11, 946	Alexandria town	5 648	2,861
Galena city	10, 155	2,496	Baton Rouge city	11, 269	10, 478
Holton city	2,829	2,486 2,727	Crowley town	4,214	420
Horton city	3 398	3,316	Donaldsonville town	5,648 11,269 4,214 4,105	3, 121
Hutchinson city	9, 379	8,682	Alexandria town. Baton Rouge city. Crowley town Donaldsonville town. Franklin town Houma town Lafayette town. Lake Charles town	2, 692 3, 212 3, 314	2, 127
Independence city	4,851	3, 127	Lafavette town	3,212	1,280 2,106
Iola city	5, 791	1,706	Lake Charles town	6,680	3,442
Vancas City	4,695	4,502	Monroe city	5, 428	3,256
Lawrence city	10 862	38, 316 9, 997	New Iberia town	6,815	3, 447
Leavenworth city	20, 735	19,768	Monroe city New Iberia town New Orleans city	287, 104	242, 039
McPherson city	2,996	3,172	Opelousas town		1,572
Manhattan city	3,438	3,004	Shreveport city	3,590 16,013	3, 222 11, 979
Abilene city Argentine city Arkansas City Arkansas City Arkansas City Arkansas City Arkansas City Arkansas City Chanute city Chanute city Cherryvale city Coffeyville city Concordia city Emporia city Emporia city Fort Scott city Galena city Holton city Holton city Holton city Horton city Hutchinson city Independence city Iola city Junction city Kansas City Lawrence city Leavenworth city McPherson city McPherson city Newton city Osame city Osame city Osame city Osame city Paola city Parsons city Wellington city Well city Wichita city	6, 208 9 451	5,605 3,294	Thibodaux town	3, 253	2,078
Osage city	2, 792	3, 469			
Osawatomie city	4, 191	2, 662 6, 248 2, 943 6, 736	MAINE.		
Ottawa city	6,934	6,248	Auburn city	12 951	11 250
Paola city	3,144	2,943	Augusta city	11, 683	11, 250 10, 527
Pittsburg city	7,682	6, 697	Augusta city Augusta city Bangor city Bath city Belfast city Biddeford city Brewer city	12, 951 11, 683 21, 850 10, 477	19, 103
Rosedale city	3.270	2,276	Bath city	10, 477	8,723
Salina city	6,074	6, 149	Bellast City	4,615	5, 294
Topeka city	33,608	31,007	Brewer city	16,145 4,835	14, 443 4, 193
Weir city	2,977	2,138	Bridgton town	2,868	2 605
Wighits city	4,245 24 671	4,391 23,853	Bristol town	2,572	2,821
Winfield city	5, 554	5, 184	Brunswick village	5, 210	
	0,002	. 0,101	Brewer city Bridgton town Bristol town Brunswick village Calais city Camden town	7,655	7,290
KENTUCKY.			Caribon town	2,825 4,758	4,621 4,087
Ashland city	6,800	4,195	Caribou town	3,092	2, 356
Bellevue city	6, 332		Dexter town	5, 941 5, 311 4, 379 4, 297	2,356 2,732 4,908
Bowling Green city	8, 226	7,803	Eastport city	5,311	4,908
Catlettsburg city	3,081	1,374	Flleworth oity	4,379	1,946
Cynthiana city	8, 226 3, 081 42, 938 3, 257 4, 285 6, 104	3, 163 7, 803 1, 374 37, 371 3, 016 3, 766 4, 264 1, 748 7, 892	Fairfield town	3,878	4, 804 3, 510
Danville city	4, 285	3,766	Farmington town	3, 288	3, 207
Dayton city	6, 104	4, 264	Fort Fairfield town	4, 181 2, 528	3,526
Earlington city	3,012	1,748	Fort Kent town	2,528	1,826
Frankfort city	9,487	7,892	Gorbam town	5,501	5, 491
Georgetown town	3 893	1,018	Hallowell city	2,540	2,888 3,181
Harrodsburg city	2,876	3, 230	Houlton town	2,714 4,686	4,015
Henderson city	10, 272	1,748 7,892 1,818 3,230 8,835 5,999	Jay town	2,758	1,541
Hopkinsville city	7, 280	0,000.1	Kennebunk town	3, 228	3,172
Ashland city Bellevue city Bowling Green city Catlettsburg city Covington city Cynthiana city Danville city Dayton city Earlington city Frankfort city Frankfort city Frolton town Georgetown town Harrodsburg city Hopkinsville city Lebanon city Lexington city	3,043	2,816	Chelsea town Dexter town Eastport city Eden town Ellsworth city Fairfield town Fort Fairfield town Fort Fairfield town Gardiner city Gorham town Hallowell city Houlton town Kennebunk town Kittery town Lewiston city	2,758 3,228 2,872 23,761	2,864 21.701
Lexington city	26, 369	21,567	Lewiston city	23, 761	21.701

SAFE METHODS

MAINE-cont.	1900	1890	MASSACHUSETTS-cont	1900	1890
Lisbon town	3,603	3,120	Concord townDalton town	5,652	4, 427
Lubec town	3,005	2,069	Dalton town	3,014	2,885
Madison town	2,764	1,815	Danvers town	8,542	7,454
Madison town Norway town Old Town city	2, 764 2, 902 5, 763	2,665	Danvers town Dartmouth town Dedham town Dracut town Dudley town East Bridgewater town	3,669	3, 122 7, 123
Orono town	3, 257	5,312 2,790	Drecut town	7, 457 3, 253 3, 553	1, 996
	9 005	3, 156	Dudley town	3, 553	2,944
Pittsfield town	2,891	2,503	East Bridgewater town	3,025	2,911
Pittsfield town Portland city Presque Isle town	50,145	3,156 2,503 36,425		D. 005 1	4, 395
Presque Isle town	3,804 8,150 2,595	0,040	Easton town Everett city Fairhaven town	4,837 24,336 3,567	4, 493
Rockland city	8,100	8,174	Everett city	24, 330	11,068
Saco city	6, 122	6,075			2, 919 74, 398
Sanford town	6.078	4,201	Fall Kiver City Falmouth town Fitchburg city Foxboro town Framingham town	3,500 1	2, 567
Skowhegan village South Berwick town South Portland city	6,078 4,266	1	Fitchburg city	31,531 3,266 11,302 5,017	2, 567 22, 037
South Berwick town	5. 155	3,434	Foxboro town	3,266	2, 933 9, 239
South Portland city	6, 287 2, 688 3, 145	3,009	Framingham town	11,302	9,239
		3,009	Franklin town	0,017	4,831
Waldoboro town Waterville city Westbrook city York town	3,140	3,505 7,107	Gardner town	10,010	8, 424 24, 651
Westbrook city	9,477 7,283	6,632	Gloucester city Grafton town	26, 121 4, 869	5,002
York town	2,668	2,444	Great Barrington town	5, 854	4,612
	_,	_,	Greenfield town	5, 854 7, 927 3, 203	5, 252
MARYLAND.			Hardwick town Haverhill city	3, 203	2, 922 27, 412
			Haverhill city		27, 412
Annapolis city	8,525	7,604	Hingham town	5,059	4,564
Baltimore city Cambridge town	508, 957	434, 439	Holliston town Holyoke city Hopkinton town	2,598	2,619
Chestertown town	5,747 3,008	4, 192 2, 632	Honkinton town	45, 712 2, 623	35,637 4,088
Crisfield town	3, 165	1,565	Hudson town	5, 454	4,670
Cumberland city	17, 128	12,729	Hudson town Hyde Park town	13, 244	10, 193
Lasion town	3,074	1 2, 939	I Ipswich town	4,658	4,439
Elkton town	2,542	2,318	Lawrence city	62,559	44,654
Frederick city Frostburg town Hagerstown city	9,296	8, 193	Lee town	3,596	3,785
Frostburg town	5,274	3,804	Leicester town	3,416	3,120
Hagerstown city	13, 591	10, 118	Lenox town	12, 942 12, 392	2,889 7,269
Havre de Grace city Salisbury town	3, 423 4, 277	3,244 2,905	Leominster town Lexington town	3,831	3, 197
Westminster town	3, 199	2,903	Lowell city	94, 969	77, 696
	0,200	2,000	Ludlow town	3 536	1,939
MASSACHUSETTS.		1	Lynn city Malden city Manchester town	3,536 68,513	55,727
	1		Malden city	33,664	23,031
Abington town	4,489	4,260	Manchester town	2,522	1,789
Adams town	11, 134 2, 536 9, 473 5, 028	9, 213 2, 352 9, 798	Mansfield town Marblehead town		3, 432 8, 202
Agawam town Amesbury town	9 473	9 798	Marlhoro city	13,609	13, 805
Amherst town	5, 028	4,512	Marlboro city	3,142	13, 805 2, 700
Andover town		6,142	Medfield town	2,926	1,493
Arlington town	8,603 7,061 11,335 4,364	5,629	Medford city	18, 244	11,079
Athol town	7,061	6,319	Medway town	2,761	2,985
Attleboro town	11, 335	7,577	Melrose city	12, 962	8,519
Barnstable town	2,004	4,023	Methuen town Middleboro town	7,512	4,814
Belmont town Beverly city	3,929 13,884	2,098 10,821	Milford town	6,885 11,376	6,065 8,780
Billerica town	2.775	2,380	Afillhum town	4 460	4,428
Blackstone town	2,775 5,721	6,138	Milton town	6,578	4, 278
Boston city	560,892	448,477	Monson town	3,402	3,650
Braintree town Bridgewater town	5,981	4,848	Montague town Nantucket town	6,150	6, 296
Bridgewater town	5,806	4,249	Nantucket town	3,006	3,268
Brockton city Brookfield town	40,063	27, 294 3, 352	Natick town	9, 488 4, 016	9,118 3,035
Brookline town	3,062 19,935	12,103	Needham town New Bedford city	62, 442	40, 783
Brookline town Cambridge city Canton town	91,886	70,028	Newburyport city	14, 478	13, 947
Canton town	4, 584	4,538	Newton city	33, 587	24, 379
	3 084	9 605	North Adams city	24,200	16,074
Chelsea city	34,072	27, 909	North Hampton city.	18,643	14, 990
Chelsea city	19, 167	14,050	Il North Andover town.	4, 243 7, 253	3,742 6,727
	12 667	10,424	North Attleboro town	7, 253	1 6.727

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MASSACHUSETTS—cont.	1900	1890	Michigan-cout	1900	1890
North Brookfield town	4,587	3 871	Charlotte city	4,092	3,867
Norwood town	5, 480	3,871		6,489	6, 235
Orange town	5,520	4.068	Coldwater city	6, 216	5, 247
North Brookfield town Norwood town Orange town Oxford town Palmer town Peabody town Pepperell town Provincetown town Quincy city Randolph town Reading town Revere town Rockland town Rockport town Salem city Saugus town Somerville city Southbridge town Spencer town	2,677	2,616 6,520	Cheodygan city Coldwater city Crystal Falls city Delray village Detroit city Dowagiac city Escanaba city Flint city Gladstone city Grand Haven city	3, 231	
Palmer town	7,801	6,520	Delray village	4,573	005 076
Peabody town	11,523	10. 158 1	Detroit city	285, 704	205, 876
Pepperell town	3,701	3, 127 17, 281 7, 314	Dowagiac city	4, 151 9, 549	2,806 6,808
Plumouth town	21,766	17,281	Elint city	13, 103	9 803
Provincetown town	4 947	4,514	Gladstone city	3,380 4,743 87,565 3,381	1,337
Quincy city	23, 800	4, 642 16, 723	Grand Heven city	4,743	5,023
Randolph town	3 993	3, 946	Cranica area ore orell annual	00 505	60,278
Reading town	4, 969	4,088	Greenville city	3,381	3,056
Revere town	10,395	5,668	Hancock village	4,050	1,772 2,972
Rockland town	5,327	5, 213	Hastings city	3,172	2,972
Rockport town	4,592	4,087	Hillsdale city	4, 151	3,915
Salem city	35, 956	30,801	Holland city	4, 151 7, 790 3, 359	3,945
Saugus town	5,084	3,673	Houghton village	0,509	2,062 2,387
Somerville city	61,643	40, 152	Howell village	5 209	4,482
South Hadley town	4,526	7,655 4,261	Teon Mountain city	9, 242	8, 599
Spencer town	7 627	8,747	Ironwood city	3, 359 2, 518 5, 209 9, 242 9, 705 13, 255 25, 180	8,599 7,745
Springfield city	62 059		Ishpeming city	13, 255	11, 197
Stoneham town	6, 197	6,155	Grand Rapids city- Greenville city. Hancock village Hastings city. Holland city Holland city Houghton village Howell village Ionia city Iron Mountain city Iron wood city Ishpeming city Jackson city Kalamazoo city	25, 180	
Stoughton town	5, 442	4,852	Kalamazoo city	24, 404	17,853
Sutton town	62,059 6,197 5,442 3,328 4,548 31,036	3, 180 3, 198	Kalamazoo city Lake Linden village .	2,597 16,485	1,862
Swampscott town	4,548	3,198	Lansing city	16,485	13, 102
Taunton city	31,036	25, 448 2, 999 2, 515	Laurium village	3, 297 5, 643	2,753
Templeton town,	3,489	2,999	Laurium village	7,166	1,159 7,517
Tewksbury town	3,683	2,515	Ludington city	14, 260	12,812
Wakefield town	0,099	3, 408 6, 982	Manisticus village	4, 126	
Walnole town	3, 250	2 604	Marine City	3,829	3, 268
South Hadley town Spencer town Springfield city Stoneham town Stoughton town Sutton town Sutton town Taunton city Templeton town Tauston town Uxbridge town Wakefield town Walpole town Waltham city Ware town Wareham town	23, 481	2,604 18,707 7,329	Manistee city. Manistique village Marine City Marquette city	4, 126 3, 829 10, 058 4, 370 12, 818 5, 043 6, 576 3, 662 20, 818 6, 935 6, 935	2,940 3,268 9,093
Ware town	8, 263	7, 329	Marshall city	4,370	3,968
Wareham town	3,432		Marshall city Menominee city	12,818	10,630
Warren town Watertown town	4, 417 9, 706 8, 804	4, 681 7, 073 7, 031	Monroe city	5,043	5, 258 4, 748 2, 701 22, 702
Watertown town	9,706	7,073	Mt. Clemens city	6,576	4,748
Webster town	8,804	7,031	Mt. Pleasant City	3,002	2,701
Webster town Wellesley town Westherd town	5,072	3,600	Mt. Pleasant city Muskegon city Negaunee city Nies city Norway city Owosso city Petoskey city Pontlac city Port Huron citv Red Jacket village Saginaw city St. Clair city St. Johns village St. Joseph city	6 025	6,078
Westfold town	19 210	5, 195	Nilos oity	4,287 4,170 8,696 5,285 9,769 19,158	4, 197
Westford town Westport town West Springfield town West Springfield town Weymouth town Whitman town Willamstown town Winchendon town Winchester town	2 624	9, 805 2, 250 2, 599	Norway city	4,170	2,200
Westport town	2, 890	2,599	Owosso city	8,696	6,564
West Springfield town	7,105	5,077	Petoskey city	5, 285	2,872 6,200
Weymouth town	11,324	10,866	Pontiac city	9,769	6,200
Whitman town	6, 155	4, 441	Port Huron city	19,158	13,548
Williamstown town	5,013	4, 221	Red Jacket village	4,668	3,073
Winchendon town	5,001	4,390	Saginaw city	42,340	46, 322
Winchester town	6,058	4,861	St. Clair city	2,043	2, 353 3, 127
Woburn city	14, 254	2,726 13,499	St. Johns vinage	5,155	3,733
Worcester city	118, 421	84,655	St. Joseph city Sault Ste. Marie city .	10,538	5,760
Wrentham town	2,720	2,566			1,924
(12022000000000000000000000000000000000	-,	_,	Three Rivers city	3,550	
MICHIGAN.		1	Traverse City	9,407	4 833
			West Bay City	13, 119 5, 183 7, 378	12,981
Adrian city	9,654	8,756 3,763	Wyandotte city	5, 183	3,817
Albion city	4,519	3,763	South Haven village. Three Rivers city Traverse City West Bay City Wyandotte city Ypsilanti city	7,378	6,129
Allegan village	2,667 11,802 14,509	2,669 11,283	MININGS		
Ann Arbor city	11,802			i	
Rattle Creek city	18 563	9, 431 13, 197 27, 839 1, 730	Albert Lea city	4,500	3,305
Bay City	18,563 27,628 3,282	27, 839	Alexandria village	2,681	2,118
Belding city	3, 282	1,730	Anoka city	2,681 3,769	4,252
Benton Harbor city	6,562	3,692	Austin city	5, 474	1 5,901
Bessemer city	3, 911	2,566	Blue Earth City	2,900 7,524	1,569
Big Rapids city	4,686	5,303	Brainerd city	7,524	5,703
Adrian city Albion city Allegan village Alpena city Ann Arbor city Battle Creek city Bay City Belding city Benton Harbor city Bessemer city Big Rapids city Cadillac city	5,997	4,461	Albert Lea city	1, 3,072	2,530

SAFE METHODS

MINNESOTA						
Duluth city	MINNESOTA.—cont	1900	1890	MISSOURI-cont.	1900	1890
Duluth city	Crookston city	Б. 359	3,457	Columbia city	5.851	4,000
Little Falls city 5, 774	Duluth city	59 060	33, 115	De Soto city	5, 611	3, 960
Little Falls city 5, 774	Ely city	3,717	901	Fayette city	2,717	2,247
Little Falls city 5, 774	Eveleth village	2,752		Fulton city	4,883	4,314
Little Falls city 5, 774	Fairmont village	3,040	1,205	Hannibal city	12,780	12,857
Little Falls city 5, 774	Faribault city		6,520	Higginsville city	2,791	2,342
Little Falls city 5, 774	Fergus Falls City	6,072	3,772	Independence city	6,974	6, 380
Little Falls city 5, 774	Take City	3,811	3,700	Jenerson City	9,664	6,742
New Ulm city	Little Folls city	5 774	2,120	Kaneag City	26,023	9,943
New Ulm city	Mankato city	10 500	8 838	Kirksville city	5 066	2 510
New Ulm city	Minneapolis city	202 718	164 738	Kirkwood town	9,900	1 777
Northfield city	Moorhead city	3, 730	2,088	Lamar city	9 727	2,860
Northelled city			3,741	Lexington city	4, 190	4,537
Owatonna city	Northfield city	3.210	2,659	Louisiana city	5, 131	5,090
Pripestone Village	Owatonna city	5,561	3,849	Macon city	4,068	3,371
Rechester city	Pipestone village	2,536	1,232	Marceline city	2,638	1,977
St. Cloud city	Red Wing city	7,525	6, 294	Marshall city	5,086	4,297
St. Paul city	Rochester City	6.843	5,321			4,037
St. Paul city	St. Cloud City	8,663	7,686	Mekarly ofty	5,099	4,789
Willmar village 3, 409 1, 825 St. Joseph city 102, 979 52, 324 St. Louis city 575, 238 451, 770 Sedalia city 15, 231 14, 068 Sedalia city 15, 24, 400 Sedalia city 16, 24, 400 Sedal	St. James City	2,007	199 150	Monott city	8,012	
Willmar village 3, 409 1, 825 St. Joseph city 102, 979 52, 324 St. Louis city 575, 238 451, 770 Sedalia city 15, 231 14, 068 Sedalia city 15, 24, 400 Sedalia city 16, 24, 400 Sedal	St Potercity	100,000	2 671	Noosho city	3,115	1,699
Willmar village 3, 409 1, 825 St. Joseph city 102, 979 52, 324 St. Louis city 575, 238 451, 770 Sedalia city 15, 231 14, 068 Sedalia city 15, 24, 400 Sedalia city 16, 24, 400 Sedal	Stillwater city	19 218	11, 250	Nevada city	2,720	2,198
Willmar village 3, 409 1, 825 St. Joseph city 102, 979 52, 324 St. Louis city 575, 238 451, 770 Sedalia city 15, 231 14, 068 Sedalia city 15, 24, 400 Sedalia city 16, 24, 400 Sedal	Two Harbors village	3 978	11,200	Poplar Bluff city	4 201	0 197
Willmar village 3, 409 1, 825 St. Joseph city 102, 979 52, 324 St. Louis city 575, 238 451, 770 Sedalia city 15, 231 14, 068 Sedalia city 15, 24, 400 Sedalia city 16, 24, 400 Sedal	Virginia city	2, 962		Rich Hill city	4,052	4,008
Willmar village 3, 409 1, 825 St. Joseph city 102, 979 52, 324 St. Louis city 575, 238 451, 770 Sedalia city 15, 231 14, 068 Sedalia city 15, 24, 400 Sedalia city 16, 24, 400 Sedal	Wabasha city	2,528	2,487	Richmond city	3, 478	2, 895
Winona city	Waseca city	3, 103	2,482		7,982	6, 161
Aberdeen city 3, 434 3, 449 Bay St. Louis city 2, 872 1, 974 Billoxi city 5, 467 3, 234 Brookhaven town 2, 678 2, 142 Columbus city 6, 484 4, 559 Greenada town 7, 642 6, 658 Greenada town 2, 558 2, 416 Hattiesburg town 4, 175 1, 172 Bloxicity 7, 816 Hattiesburg town 4, 175 1, 172 Bloxicity 7, 816 Jackson city 7, 816 Jackson city 7, 816 Jackson city 7, 816 Jackson city 14, 088 Nericlian city 14, 088 Nather Valley city 3, 313 Wesson town 3, 193 Wesson town 4, 944 Warrencity 2, 2, 555 Wallance city 3, 14, 684 Walkerville city 2, 2, 555 Wallance city 3, 14, 684 Walkerville city 2, 2, 555 Wallance city 3, 14, 684 Walkerville city 3, 14, 684 Walkerville city 3, 14, 684 Walkerville city 3, 14, 547 Wallance city 3, 14, 547 Wallan	Willmar village	3,409	1,825	St. Joseph city	102, 979	52, 324
Aberdeen city 3, 434 3, 449 Bay St. Louis city 2, 872 1, 974 Billoxi city 5, 467 3, 234 Brookhaven town 2, 678 2, 142 Columbus city 6, 484 4, 559 Greenada town 7, 642 6, 658 Greenada town 2, 558 2, 416 Hattiesburg town 4, 175 1, 172 Bloxicity 7, 816 Hattiesburg town 4, 175 1, 172 Bloxicity 7, 816 Jackson city 7, 816 Jackson city 7, 816 Jackson city 7, 816 Jackson city 14, 088 Nericlian city 14, 088 Nather Valley city 3, 313 Wesson town 3, 193 Wesson town 4, 944 Warrencity 2, 2, 555 Wallance city 3, 14, 684 Walkerville city 2, 2, 555 Wallance city 3, 14, 684 Walkerville city 2, 2, 555 Wallance city 3, 14, 684 Walkerville city 3, 14, 684 Walkerville city 3, 14, 684 Walkerville city 3, 14, 547 Wallance city 3, 14, 547 Wallan	Winona city	19,714	18,208	St. Louis city	575, 238	451,770
Aberdeen city				Sedalia city	15, 231	14,068
Aberdeen city	MISSISSIPPI.			Slater city	2,502	2,400
Bilox city	Abardoon aitu	0.404	0.440	Springheld city	23, 267	21,850
Greenvolle town 7, 642 6, 658 Greenwood city 3, 026 1, 055 Grenada town 2, 568 2, 416 Hattiesburg town 4, 175 1, 172 Holly Springs city 2, 815 2, 246 Holly Springs city 2, 815 2, 246 Holly Springs city 2, 815 2, 246 Holly Springs city 3, 3, 221 Bozeman city 3, 419 2, 143 Jackson city 7, 816 5, 920 Meridian city 14, 050 10, 624 Natchez city 12, 210 Natchez city 12, 210 Vicksburg city 4, 381 3, 373 Wesson town 3, 193 West Point town 3, 193 Aurora city 4, 494 MISSOUR. Aurora city 6, 191 Boonville city 4, 377 Hench and the properties of the prope	Roy St Louis sity	3,434	3,449	Tronton city	2,654	2,035
Greenvolle town 7, 642 6, 658 Greenwood city 3, 026 1, 055 Grenada town 2, 568 2, 416 Hattiesburg town 4, 175 1, 172 Holly Springs city 2, 815 2, 246 Holly Springs city 2, 815 2, 246 Holly Springs city 2, 815 2, 246 Holly Springs city 3, 3, 221 Bozeman city 3, 419 2, 143 Jackson city 7, 816 5, 920 Meridian city 14, 050 10, 624 Natchez city 12, 210 Natchez city 12, 210 Vicksburg city 4, 381 3, 373 Wesson town 3, 193 West Point town 3, 193 Aurora city 4, 494 MISSOUR. Aurora city 6, 191 Boonville city 4, 377 Hench and the properties of the prope	Biloxi city	5 467	2 224	Warrenshire city	5, 396	5,039
Greenvolle town 7, 642 6, 658 Greenwood city 3, 026 1, 055 Grenada town 2, 568 2, 416 Hattiesburg town 4, 175 1, 172 Holly Springs city 2, 815 2, 246 Holly Springs city 2, 815 2, 246 Holly Springs city 2, 815 2, 246 Holly Springs city 3, 3, 221 Bozeman city 3, 419 2, 143 Jackson city 7, 816 5, 920 Meridian city 14, 050 10, 624 Natchez city 12, 210 Natchez city 12, 210 Vicksburg city 4, 381 3, 373 Wesson town 3, 193 West Point town 3, 193 Aurora city 4, 494 MISSOUR. Aurora city 6, 191 Boonville city 4, 377 Hench and the properties of the prope	Brookhaven town	2 678	9 142	Washington city	9 015	9,700
Greenvolle town 7, 642 6, 658 Greenwood city 3, 026 1, 055 Grenada town 2, 568 2, 416 Hattiesburg town 4, 175 1, 172 Holly Springs city 2, 815 2, 246 Holly Springs city 2, 815 2, 246 Holly Springs city 2, 815 2, 246 Holly Springs city 3, 3, 221 Bozeman city 3, 419 2, 143 Jackson city 7, 816 5, 920 Meridian city 14, 050 10, 624 Natchez city 12, 210 Natchez city 12, 210 Vicksburg city 4, 381 3, 373 Wesson town 3, 193 West Point town 3, 193 Aurora city 4, 494 MISSOUR. Aurora city 6, 191 Boonville city 4, 377 Hench and the properties of the prope	Canton city	3, 404	2, 131	Webb City	0 201	5,720
Greenvolle town 7, 642 6, 658 Greenwood city 3, 026 1, 055 Grenada town 2, 568 2, 416 Hattiesburg town 4, 175 1, 172 Holly Springs city 2, 815 2, 246 Holly Springs city 2, 815 2, 246 Holly Springs city 2, 815 2, 246 Holly Springs city 3, 3, 221 Bozeman city 3, 419 2, 143 Jackson city 7, 816 5, 920 Meridian city 14, 050 10, 624 Natchez city 12, 210 Natchez city 12, 210 Vicksburg city 4, 381 3, 373 Wesson town 3, 193 West Point town 3, 193 Aurora city 4, 494 MISSOUR. Aurora city 6, 191 Boonville city 4, 377 Hench and the properties of the prope	Columbus city	6,484		West Plains city	2, 902	2,091
Hattlesburg town 4,175 1,172 Billings city 3,221 836 Allular city 2,815 2,246 Bozeman city 3,412 Bozeman city 3,221 836 Great Falls city 3,221 836 Great Falls city 4,980 Allular city 14,050 10,624 Helena city 10,770 13,834 Meridian city 14,050 10,624 Kalispel city 10,770 13,834 Meridian city 14,834 13,373 Wesson town 3,279 3,168 Wesson town 3,279 3,168 Wesson town 3,279 3,168 Wesson town 3,193 2,762 Walker Valley city 4,944 3.286 Alliance city 2,664 1,537 Missoula city 4,366 3,426 Malker Valley city 4,377 4,141 Brookfield city 4,377 4,141 Brookfield city 5,484 4,547 Fairbury city 2,270 2,069 Columbus city 3,162 Cameron city 2,979 2,917 Fremont city 3,022 2,630 Fremont city 3,022 2,630 Care Grardeau city 4,815 4,297 Grard Falls city 3,221 836 Butter city 3,168 2,812 Falls City 3,124 Grard city 7,241 6,747 Fremont city 3,022 2,102 Fremont city 7,241 6,747 Grard Falsan city 7,241 6,747	Corinth city	3,661	2,111		2,002	2,002
Hattlesburg town 4,175 1,172 Billings city 3,221 836 Allular city 2,815 2,246 Bozeman city 3,412 Bozeman city 3,221 836 Great Falls city 3,221 836 Great Falls city 4,980 Allular city 14,050 10,624 Helena city 10,770 13,834 Meridian city 14,050 10,624 Kalispel city 10,770 13,834 Meridian city 14,834 13,373 Wesson town 3,279 3,168 Wesson town 3,279 3,168 Wesson town 3,279 3,168 Wesson town 3,193 2,762 Walker Valley city 4,944 3.286 Alliance city 2,664 1,537 Missoula city 4,366 3,426 Malker Valley city 4,377 4,141 Brookfield city 4,377 4,141 Brookfield city 5,484 4,547 Fairbury city 2,270 2,069 Columbus city 3,162 Cameron city 2,979 2,917 Fremont city 3,022 2,630 Fremont city 3,022 2,630 Care Grardeau city 4,815 4,297 Grard Falls city 3,221 836 Butter city 3,168 2,812 Falls City 3,124 Grard city 7,241 6,747 Fremont city 3,022 2,102 Fremont city 7,241 6,747 Grard Falsan city 7,241 6,747	Greenville town	7,642	6,658	MONTANA.		
Hattlesburg town 4,175 1,172 Billings city 3,221 836 Allular city 2,815 2,246 Bozeman city 3,412 Bozeman city 3,221 836 Great Falls city 3,221 836 Great Falls city 4,980 Allular city 14,050 10,624 Helena city 10,770 13,834 Meridian city 14,050 10,624 Kalispel city 10,770 13,834 Meridian city 14,834 13,373 Wesson town 3,279 3,168 Wesson town 3,279 3,168 Wesson town 3,279 3,168 Wesson town 3,193 2,762 Walker Valley city 4,944 3.286 Alliance city 2,664 1,537 Missoula city 4,366 3,426 Malker Valley city 4,377 4,141 Brookfield city 4,377 4,141 Brookfield city 5,484 4,547 Fairbury city 2,270 2,069 Columbus city 3,162 Cameron city 2,979 2,917 Fremont city 3,022 2,630 Fremont city 3,022 2,630 Care Grardeau city 4,815 4,297 Grard Falls city 3,221 836 Butter city 3,168 2,812 Falls City 3,124 Grard city 7,241 6,747 Fremont city 3,022 2,102 Fremont city 7,241 6,747 Grard Falsan city 7,241 6,747	Greenwood city	3,026	1.055			
West Point town 3, 193 2, 762	Grenada town	2,568	2,416	Anaconda city	9,453	3,975
West Point town 3, 193 2, 762	Hattlesburg town	4,175	1,172	Billings City	3, 221	836
West Point town 3, 193 2, 762	Incheon city	2,810	5,240	Butte city	3,419	2,143
West Point town 3, 193 2, 762	Laurel town	9 102	0,920	Great Falls city	30,470	10,723
West Point town 3, 193 2, 762	McComb town	4 477	2 383	Helena city	10,770	12 924
West Point town 3, 193 2, 762	Meridian city	14, 050	10,624	Kalispel city	2 526	10,004
West Point town 3, 193 2, 762	Natchez city	12,210		Livingston city	2,778	2,850
West Point town 3, 193 2, 762	Vicksburg city	14,834	13,373	Missoula city	4,366	3,426
West Point town 3, 193 2, 762	Water Valley city	3,813	2,832	Walkerville city	2,621	1,743
Autora city	Wesson town	3,279	3,168		1 '	
Autora city	West Point town	3, 193	2,762	NEBRASKA.		
Autora city	razoo City	4,944	3,286	Alliamas situs		
Aurora city. 6, 191 3, 482 Boonville city. 4, 377 4, 141 Brookfield city. 5, 484 4, 547 Butler city. 3, 158 2, 812 Cameron city. 2, 979 2, 917 Cape Girardeau city. 4, 815 4, 297 Fremont city. 7, 241 Grand Falsan city. 7, 241	MISSOURI			Aubum aitu	a, 5.75	
Boonville city 4,377 4,141 Columbus city 2,970 2,009 Brookfield city 5,484 4,547 Fairbury city 3,522 3,136 Butler city 3,158 2,812 Fails City 3,022 2,620 Cameron city 2,979 2,917 Fremont city 7,241 6,747 Cape Girardeau city 4,815 4,297 Grand Island city 7,241 6,747	21100001111	i		Restrice sity	2,664	1,537
Boonville city 4,377 4,141 Columbus city 2,970 2,009 Brookfield city 5,484 4,547 Fairbury city 3,522 3,136 Butler city 3,158 2,812 Fails City 3,022 2,620 Cameron city 2,979 2,917 Fremont city 7,241 6,747 Cape Girardeau city 4,815 4,297 Grand Island city 7,241 6,747	Aurora city	6, 191	3,482	Blair city	7,875	13,836
Brookfield city 5, 484 4, 547 Fairbury city 3, 582 3, 184 2, 628 Butler city 3, 158 2, 812 Falls City 3, 022 2, 102 Cameron city 2, 979 2, 917 Fremont city 7, 241 6, 747 Carrollton city 3, 854 3, 878 Grand Islaud city 7, 554 7, 554 Carterville city 4, 445 2, 884 Holdrege city 7, 188 13, 584 Carthage city 9, 416 7, 981 Kearuey city 5, 634 8, 074 Chillicothe city 6, 905 5, 717 Lincoln eity 40, 169 56, 154 Clinton city 5, 061 4, 737 Nebraska.City 7, 380 11, 915	Boonville city	4,377	4, 141	Columbus city.	2,970	2,069
Butler city 3, 158 2, 812 Falls City 3, 120 2, 2,000 Cameron city 2,979 2, 917 Fremont city 7, 241 6,747 Cape Girardeau city 4, 815 4, 297 Grand Island city 7, 241 6, 747 Grand Island city 7, 158 13, 584 Carterville city 4, 445 2, 884 Holdrege city 3, 007 2, 601 Carthage city 9, 416 7, 981 Kearuey city 5, 634 8, 074 Chillicothe city 6, 905 5, 717 Lincoln city 40, 169 55, 154 Clinton city 5, 661 4, 737 Nebraska City 7, 389 11, 914	Brookfield city	5, 484	1 4.547	Fairbury city	3 140	9 620
Cameron city. 2, 979 2, 917 Fremont city. 7, 241 6, 747 Care Girardeau city. 4, 815 4, 297 Grand Island city. 7, 544 6, 747 Carrollton city. 3, 854 3, 878 Hastings city. 7, 188 13, 584 Carterville city. 4, 445 2, 884 Holdrege city. 3, 007 2, 601 Carthage city. 9, 416 7, 981 Kearuey city. 5, 634 8, 074 Chillicothe city. 6, 905 5, 717 Lincoln city. 40, 169 55, 154 Clinton city. 5, 061 4, 737 Nebraska City. 7, 380 11, 911	Butler city	3,158	2,812	Falls City	3 022	2,000
Carrolton city 4, 815 4, 297 Grand Island city 7, 554 7, 536 Carrolton city 3, 854 3, 878 Hastings city 7, 188 13, 584 Carterville city 4, 445 2, 884 Holdrege city 3, 007 2, 601 Chillicothe city 6, 905 5, 717 Liincol neity 5, 634 8, 074 Clinton city 5, 661 4, 737 Nebraska City 7, 380 11, 914	Cameron city	2,979	2,917	Fremont city	7, 241	6, 747
Carterville city. 4, 445 2, 884 Holdrege city 2, 007 2, 601 Carthage city 9, 416 7, 7981 Kcaruey city 5, 634 8, 074 Chillicothe city 6, 905 5, 717 Lincoln city 5, 661 4, 737 Nebraska City 7, 380 11, 911	Carrollton ofty.	4,815	4,297	Grand Island city	7,554	7,536
Carthage city 9,416 7,981 Kearney city 3,007 2,601 Chillicothe city 6,905 5,117 Lincoln city 40,109 55,154 Clinton city 5,061 4,737 Nebraska City 7,380 11,311	Carterville oity	3,854	3,878	Hastings city	7,188	13,584
Chillicothe city 6, 905 5, 717 Lincoln city 5, 634 8, 674 Clinton city 5,061 4,737 Nebraska City 7, 380 11, 911	Carthage city	9,445	7 091	Holdrege city	3.007	2,601
Clinton city			5 717	Libealn city	5, 634	8,074
7,380 1 11,911	Clinton city	5.061	4 737	Nebraska City	40, 169	55, 154
		3 0,001	8 , 2, 101	ii itoniand only	1 7,380	11,911

NEBRASKA—cont:	1900	1890	NEW JERSEY—cont	1900	1890
Norfolk city North Platte city Omaha city Plattsmouth city South Omaha city Wymore city York city.	3,883	3,038	Hoboken city	59, 364	43,648
North Platte city	3, 640 102, 555 4, 964 26, 001	3,038	Jersey City Kearney town Lambertville city Long Branch town Medican berough	5, 255 206, 433	163,003
Plattsmouth city	4, 964	140, 452 8, 392 8, 062	Kearney town	10,896	
South Omaha city	26,001	8,062	Keyport town	3,413 4,637	3,411
Wymore city	2,626 5,132	2,420 3,405	Lambertville city	4,637	4, 142 7, 231
York city	5, 132	3,400	Madison horough	.8,872 3,754	7, 231 2, 469 10, 002
NEVADA.			Millville city	10,583	10,002
Dama tarmi	4 500	9 509	Montclair town	13,962	8,656
Reno town	2, 695	3,563 8,511	Newark city	246, 070	181, 830
	2,000	0,011	New Brunswick city.	20,006	18,603
NEW HAMPSHIRE.			Newton town	4,376	3,003
Berlin city	8, 886	3,729	Orange city	24.141	18,844
Claremont town	6, 498	5,565	Passaic city	27,777	13,028
Concord city	19,632	17,004	Paterson city	105, 171	78,347
Derry town	3, 583	2,331 2,604	Phillipshurg town	10,052	8,644
Dover city	13, 207	12,790	Plainfield city	15, 369	11,267
Exeter town	4,922	4,284	Princeton borough	3,899	3,422
Goffstown town	2, 528	4,085 1,981	Ranway City	3, 244	2,556
Haverhill town	3, 414	2,545 7,446	Red Bank town	5,428	4,145
Keene city	9,165	7,446	Ridgewood village	2,685	1,047
Lancaster town	3, 190	6,143	Salem city	5.811	5, 516
Lebanon town	4, 965	3, 373 3, 763 3, 365	Somerville town	4,843	3,861
Littleton town	4,066	3,365	South Amboy borough	6,349	4,330
Milford town	3, 739	44, 126 3, 014	South Grange Village.	2, 792	1, 796
Nashua city	23,898	3,014 19,311 2,742 2,623	Summit city	5,302	3,502
Newmarket town	2,892	2,742	Trenton city	73,307	57,458
Pembroke town	3, 183	3, 172	Vailshurg horough	2,779	786
Peterboro town	2,527	2,507	Vineland borough	4,370	3,822
Portsmouth city	10,637	9,827	Washington borough.	3,580	2,834
Somersworth city	7, 023	6, 207	West New York town	5, 267	11,000
Walpole town	2,693	3, 172 2, 507 9, 827 7, 396 6, 207 2, 163	West Orange town	6,889	4,358
NEW HAMPSHIRE. Berlin city Claremont town Concord city. Conway town Derry town. Dover city. Exeter town Franklin city. Goffstown town Haverhill town Keene city. Laconia city Laencaster town Lebanon town Littleton town Manchester city. Milford town Nashua city Newmarket town Pembroke town Penterboro town Portsmouth city Rochester city. Somersworth city Walpole town			Lambertville city Long Branch town. Madison borough Millville city. Montclair town. Morristown town. Newark city. New Brunswick city. New Brunswick city. New Brunswick city. Newton town North Plainfield borot Orange city Patsaic city. Patenson city. Perth Amboy city. Phillipsburg town Plainfield city. Princeton borough. Rahway city. Raitan town Red Bank town Ridgewood village. Rutherford borough. Salem city. Somerville town South Amboy borough. South Orange village. South Orange village. South Wier borough. Summit city. Trenton city Union town Vailsburg borough. Washington borough. Washington borough. West Hoboken town. West New York town West Orange town Woodbury city.	4,087	3,911
Asbury Park city Atlantic City Bayonne city Bloomfield town Boonton town Boonton town Bordentown city Boundbrook borough Bridgeton city Camden city Carlstadt borough Dover town East Newark borough East Orange city East Butherford boro	4,148				
Atlantic City	27,838	13,055 19,033 7,708	Albuquerque city	6,238	3,785
Bloomfold town	32,722	19,033	Gallup town	2,946	0.005
Boonton town	3,901	7,100	Raton city	3,540	2,385 1,255
Bordentown city	4,110	4, 232	Albuquerque city Gallup town Las Vegas city Raton city Santa Fe city Silver City	2,946 3,552 3,540 5,603 2,735	6, 185
Boundbrook borough .	13 913	1, 462 11, 424 7, 264 58, 313	Silver City	2,735	2,102
Burlington city	7, 392	7, 264	NEW YORK.	ł	
Camden city	75, 935	58,313			1
Carlstadt borough,	5 038	1,549	Albany city	94, 151	94, 923 4, 586
East Newark borough	2,500		Albany city	4,477 20,929	17, 336
East Orange city	21,506	13, 282			25,858
Elizabeth city	52, 130	13, 282 1, 438 37, 764	Baldwinsville village Ballston Spa village Batavia village Bath village	2,992 3,923	3,040 3,527
Englewood city	6, 253 2, 934 3, 504	01,104	Batavia village	9,180	7. 221
Freehold town	2,934	2,932	Bath village	4,994	3, 261
Garneld borough	3,504 6,840	1,028	Bath on Hudson villag	4,994 e 2,504 1 39,647	3, 261 2, 399 35, 005
Guttenberg town	3,825	1,947	Brockport village	3,398	3,742
Hackensack town	9,443	6,004	Buffalo city	352, 387	3,742 255,664
East Butherford boro' Elizabeth city Englewood city Freehold town Garfield borough Gloucester City Guttenberg town Hackensack town Haddonfield borough Hammonton town Harrison town	2,776 3,481	3, 833	Binghamton city Brockport village Buffalo city Canandaigua village Canastota village Canton village	6, 151	5,868 2,774 2,580
Harrison town	10,596	8,338	Canton village	2,757	2,680

SAFE METHODS

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NEW YORK-cont.	1900	1890	NEW YORK-cont	1900	1890
Carthage village	2,895	2,278 4,920	Ossining village	7, 939 22, 199 2, 925 5, 039 2, 926 10, 358	9,352
Catebill willage	5 484 1	4,920	Oswego city Oswego Falls village .	22, 199	21,842
Clyde village	2,507	2,638	Oswego Falls village .	2,925	1,821
Clyde village Cohoes city Corning city Cortland city Coxsackie village	2,507 23,910	2,638 22,509	Owego village	5,039	
Corning city	11,061	8,550	Patchogue village	2,926	
Cortland city	9,014	8.590	Peekskill village	10,358	9,676
Coxsackie village	2,735 3,683	1,611	Penn Yan village		4,254
pansvine vinage	0,000	3, 100	Perry village	2,763	1,528
Depew village	3,379	2,083	Perry village Platisburg village Port Chester village	8,434	7,010
Dobbs Ferry village	2,888	2,000	Port Torris village	7,440	5, 274 9, 327
Dunkirk city	11,616		Port Jervis village Potsdam village	9, 385 3, 843	3, 961
East Syracuse village	2,509 2,879	2,231 2,881	Poughkeepsie city Rensselaer city Rochester city Rome city Salamanca village	24, 029	22, 206
Ellenville village	35, 672	30, 893	Rensselaer city	7,466	7,301
Elmirà city Fishkill Landing villa	ge 3,673	3,617	Rochester city	162,608	133, 896
Fort Edward village .	3,521	0,021	Rome city	15, 343	14, 991
Frankfort village	2,664	2,291	Salamanca village	4, 251	3,692
Fredonia village	4,127	3,399	Sandy Hill village	4,473	2,895
Freeport village	2,612	1 '	Saranac Lake village.	2,594	768
Fulton village	2,612 5,281	4,214 7,557 9,509	Saratoga Springs villag	e 12,409	11, 975
Geneva city	10,433	7,557	Saugerties village	3,697	4, 237
Glens Falls village	12,613 18,349	9,509	Schenectady city	31,682	19,902
Gloversville city	18,349	13,864	Seneca Falls village	6,519	6, 116
Gloversville city Goshen village	2,826	2,907	Solvay village	3,493	563
Gouverneur village	2,826 3,689	3,458	Syracuse city Tarrytown village	108,374 4,770	88, 143
Granville village	1 . 2,700		Tonawanda village	7,421	3,562 7,145
Green Island village.	4,770	4,463			
Haverstraw village	5, 935	5,070	Troy city	60,651	60,956
Hempstead village	3,582	4,831	Wolden willege	06,383	44,007
Herkimer village Hoosick Falls village	5,555 5,671	7 014	Utica city Walden village Walton village Wappingers Falls ville	0,147	2,132
Hornellsville city	11, 918	7, 014 10, 996	Wanningers Falls ville	2,011	2,299 3,718
Hudson city	9,528	9,970	Warsaw village	3,048	3, 120
Hudson city Ilion village Ithaca city Jamestown city	5, 138	4,057	Waterford village	3,146	0, 120
Ithaca city	13, 136	11,079	Waterloo village	4,256	4,350
Jamestown city	22,892	16,038	Watertown city	21,696	14,725
Johnstown city Kingstown city	10,130	7,768	Watervliet city	14, 321	12,967
Kingstown city	24,535	21,261	Watkins village	2,943	2,604
Lancaster village Lansingburg village .	3,750	1,692	Waverly village Wellsville village	4,465	4, 123
Lansing burg village .	12,595 3,144	10,550 2,743	Whitehall village	3,556	3,435 4,434
Leroy village Lestershire village	3, 111	2, 140	White Plains village .	4,377 7,899	4,042
Little Falls city	10,381	8,783	Yonkers city	47,931	32,033
Lockport city	16,581	16,038	1 connects city	21,001	02,000
Lockport city Lyons village	4,300	4,475	NORTH CAROLINA.		
		4,986		1	}
Matteawan village	1 5,807	4,278	Asheville city	14,694	10,235
		2,679	Burlington town	2 600	1,716
Medina village Middletown city	4,716	4, 492 11, 977	Charlotte city	1 1 2 001	11,557
Middletown city	14,522	11,977	Concord city	7,910	4,339
Mt. vernon city	21,228	10,830	Edonton town	6,679	5,485
Mt. Vernon city Newark village Newburg city New Rochelle city New York city Bronx borough Brooklyn borough Manhattan borq' Queens borough Richmond boro. Nigara Falls city	4,578	3,698	Concord city Durham city Edenton town Elizabeth City town	3,046 6,348	5, 485 2, 205 3, 251
New Rochelle city	14 790	9,057			4, 222
New York city	3 437 202	1, 515, 301			1,033
Bronx borough	200, 507	2,020,001	Gastonia town Goldsboro city Greensboro city Greenville town Henderson town	5,877	4.017
Brooklyn borough	1, 166, 582		Greensboro city	10,035	3,317 1,937 4,191
Manhattan borg	1,850,093		Greenville town	2,565	1,937
Queens borough	152, 999		Henderson town	3,746	4, 191
Richmond boroz.	67,021		Hickory town High Point village	2,565 3,746 2,535	2,023
Niagara Falls city North Tarrytown villa North Tonawanda city	.1 19,457		High Point village	4,163	
North Tarrytown villa	ge 4,241	3,179	Kinston town	4,106	1,726 1,768 7,843
Norwich village	5,069	4, 193	Mt. Alry town	2,680 9,090	1,768
Norwich village	0, 700	0,212	Poloigh offy	9,090	7,843
Ogdensburg city	12 633	11 662	Referrille town	2 260	12,678
Olean city	9, 462	3, 179 4, 793 5, 212 4, 111 11, 662	Rocky Mount town	13,643 3,262 2,937	2,969 816
Nyack village Ogdensburg city Olean city Oneida village Oneonta village	6,364	11,662 7,358 6,083 6,272	High Point Village Kinston town Mt. Airy town Newbern city Raleigh city. Reidsville town Rocky Mount town Salem city. Salisbury city	3,642	2,711
Oneonta village	7,147	6,272	Salisbury city	3,642 6,277	4,418
A	APOPOLIS		•		

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NORTH CAROLINA-cont	1000	1890	оню-cont	1900	1890
Stateswille eity	910	0000	Hillsboro village Ironton eity Jackson city Kent village Kenton city Lakewood hamlet Lancaster city Lebanon village Leetonia village Leetonia village Lockland village Lockland village Lockland village Lockland village Lockland village Lockland village Lorain city Madisonville village Mansfield city Marietta city Martins Ferry city Martins Ferry city Martins Ferry city Middleport village Massillon city Middleport village Middleboun city Mingo Junction village Mt. Vernon city Napoleon village Newburg hamlet New Comerstown villa New Philadelphia city Niles city North Baltimore villag Norwalk city	A 505	2 600
Statesville city	3, 141 4, 842	2,010	Hillsboro village	4,535 11,868	3,620 10,939
Wilmington city	20, 976	20, 056	Jackson city	4,672	4,320
Wilmington city Wilson town	3, 525	2, 126	Kent village	4,541	3,501
Winston city	10,008	8,018	Kenton city	6,852	5,557
,		,,,,,,	Lakewood hamlet	3,355	
NORTH DAKOTA		1	Lancaster city	8,991	7,555
Int			Lebanon village	2,867	3,050
Bismarck city Fargo city Grand Forks city Jamestown city	3,319	2, 136	Leetonia Village	2,744	2,826
Grand Forks city	9,589 7,652	5,664	Lima city	21,723	15, 981
Inmestown city	2,853	9,979	Lookland village	2 605	2,278 2,474
, damestown city	2,000	2,200	Logan village	3, 480	3, 119
OHIO.		1 3	London village	3,511	3,313
1		1	Lorain city	16,028	4,863
Ada village	2,576	2,079	Madisonville village .	3, 140	2, 214 13, 473
Akron city	42,728	27,601	Mansfield city	17,640	13,473
Alliance city	8,974	7,607	Marietta city	13,348	8,273
Ashtabula aity	4,087	3,566	Marion city	7 760	8, 327 6, 250 2, 810 10, 092
Athens village	2 066	0,000	Marveyille willege	3,700	9, 200
Barberton village	4 354	2,020	Massillon city	11, 944	10,092
Barnesville village	3, 721	3, 207	Miamisburg city	3,941	2,952
Bellaire city	9,912	3, 207 9, 934 4 245	Middleport village	2,799	3,211
Bellefentaine city	6,649	4,245	Middletown city	9,215	2,952 3,211 7,681
Bellevue village	4, 101	3,052	Mingo Junction village	2,954	1,856
Berea village	2,510	2,533	Mt. Vernon city	6,633	6,027
Bridgeport villege	5,067	3,467	Napoleon village	5,639	2,764
Bryan village	3, 903	3,309	Neisonvine vinage	18 157	4,558 14,270
Bucyruscity	6 560	5 974	Newhure hamlet	5, 909	12,210
Cambridge city	8, 241	4, 361	New Comerstown villa	gè 2,659	1,251
Canal Dover village	5,422	3, 470	New Philadelphia city	6,213	4,456
Ada village. Akron city Akliance city Ashland village Ashtabula city Ashland village Barberton village Barnesville village Barnesville village Bellaire city Bellefentaine city Bellefentaine city Belleve village Berea village Berea village Berea village Bowling Green town Bridgeport village Bryan village Bryan village Bucyrus city Cambridge city Cand Dover village. Canton city Carthage village Celina village Celina village Cieveland city Circlevile village Cleveland city Circlevile village Columbus city Conneaut village Couneaut village Conneaut village Conneaut village Conneaut village Conneaut village Content village Crestline village	30,667	26, 189	Niles city	7,468	4,289
Carthage village	2,559	2, 257 2, 702 11, 288	North Baltimore villag	o 3,561 7,074	2,857 7,195
Celina village	2,815	2,702	Norwalk city Norwood village	7,074	7,195
Chilicothe City	12,976	296, 908	Norwood village	6,480 4,082	A 970
Circleville villege	6 001	6 556	Painerville village	5,024	4,370
Cleveland city	381, 768	6,556- 261,353 2,327	Pique city	12,172	9,090
Clyde village	2,515	2,327	Pomerov city	4,639	4,726
Collinwood village	3,639		Norwood village Oberlin village Painesville village Piqua city Pomeroy city Portsmouth city Ravenna village Padding village	17,870	4, 376 4, 755 9, 090 4, 726 12, 394
Columbus city	125,560	88,150	Ravenna village	4,003	3, 417
Conneaut village	7, 133	3,241	Reading village	3,076	
Cosnocton village	0,473	3,072	St. Bernard Village	5 250	1,779
Curahora Falls village	3 186	2,511	Solam city	7 582	3,000 5,780
Dayton city	85, 333	61, 220	Sandusky city	19, 664	18,471
Defiance city	7,579	7,694	Shawnee village	2,966	3,266
Cincinnati city Circleville village Cleveland city Clyde village Collinwood village Collinwood village Conneaut village Coshocton village Coshocton village Curahoga Falls village Dayton city Defiance city Delphos city Dennison village East Cleveland village East Lieverpool city	7,940	8, 224	Shelby village	4,685	1,977
Delphos city	4,517	4,516	Sidney city	5,688	4,850
Dennison village	3,763	2,925	Springfield city	38,253	31,895
East Cleveland village	16 495	10.056	Steubenville City	14,349	13,394
Faton village	3 155	2 934	Toledo city	131 822	10,801 81,434
Elmwood Place village	2, 532	2,001	Toronto village	3,526	2,536
Elvria city	8,791	5, 611	Trov city	5,881	4,494
Findlay city	17, 613	18,553	Uhrichsville city	4,582	3,842
Fostoria city	7,730	7,070	Upper Sandusky villag	e 3,355	3,572
Franklin village	2,724	2,729	Urbana city	6,808	6,510
Coling city	8,439	7,141	Van Wert city	6,422	5,512
Gallipolis city	5,499	. 0,320	Wapakoneta village	8,500	3,616
Girard village	2,630	4, 270	Washington Court Hou	0,029	5,973 5,742
Glenville village	5, 588		Wellston city	8,045	4,377
Greenfield village	3, 979	2,460	Wellsville city.	6,146	5, 247
Greenville city	5,501	5,473	Wilmington city	3,613	4,377 5,247 3,079
Hamilton city	23, 914	17,565	Wooster city	6,063	5,901
East Cleveland village East Liverpool city Eaton village Elmwood Place village Elyria city Findlay city Frostoria city Franklin village Fremont city Gallipolls city Girard village Glenville village Greenfield village Greenville city Hamilton city Hicksville village	2,520	2.141	Painesville village Piqua city Pomeroy city. Portsmouth city. Ravenna village Reading village St. Bernard village Salem city Sandusky city Shawnee village Sidney city Springfield city Steubenville city Toledo city Toronto village Troy city Unrichsville city Unper Sandusky villag Urbana city Van Wert city Wapakoneta village. Warren city Washington Court Hou Wellston city Wellsville city Willington city Wooster city Wooster city Xenia city	8,696	7,301

SAFE METHODS

оню—cont	1900	1890	PENNSYLVANIA—cont	1900	1890
Youngstown city	44, 885 23, 538	33, 220	Coudersport borough.	3,217	1,530
Zanesville city	23,538	21,009	Danville borough	8,042	7,998
OKLAHOMA.			Darby borough	3,429 4,948	2,972
			Doylestown borough .	3,034	3,110 2,519 6,149
Elreno city	3,383	285	Dubois borough	3,034 9,375 12,583	6, 149
Cuthrie city	3,444	5, 333 4, 151	Dunmore borough Duquesne borough	12,583	8,315
Oklahoma City	10,000	4,151	East Mauch Chunk bo	9,036 ro 3,458	2,772
Perry city	3, 444 10, 006 10, 037 3, 351 2, 528		East Pittsburg borough	75, 3, 458 25, 238 2, 883	14, 481
Ponca city	2,528 3,462		East Pittsburg boroug.	2,883	1 910
Shawnee city	0, 202		East Stroudsburg boro Edwardsville borough	2,040	1,819 3,284
OREGON.			Elliott horough	3,345	
Albany city Ashland city Astoria city Baker City Baker City Eugene city La Grande city Oregon City Pendleton town Portland city Salem city The Dalles city	2 140	2 070	Erie city	52,733	40,634 3,767 1,255 2,319
Ashland city	3, 149 2, 634 8, 381	3,079 1,784 6,184	Ford City borough	2,870	1 255
Astoria city	8,381	6, 184	Forest City borough	4, 279	2,319
Baker City	6,663	2,604	Frackville borough Franklin city (Venang	2,594	2,520 6,221 1,730
La Grando oity	3,236	2,583	Franklin city (Venang	(0) 7,317	6,221
Oregon City	6, 663 3, 236 2, 991 3, 494 4, 406 90, 426 4, 258	3,062	Gallitzin horough	5, 254	2, 392
Pendleton town	4,406	2,506 46,385	Catterahana hananah	2,759 3,495 4,373	2,392 3,221
Portland city	90, 426	46, 385	Gilberton borough. Gilberton borough. Greensburg borough. Greenside borough. Hanovet borough. Harrisburg city. Hazelton city. Hollidaysburg boro. Homestead borough.	4,373	3,687
The Dalles city	4,258 3,542	3,029	Greensburg borough.	3,666 6,508	3,584 4,202
2110 241100 0103 1111111	0,012	0,020	Greenville borough	6,508 4,814	3.674
PENNSYLVANIA,		}	Hanover borough	5,302	3,746
Allegheny city	129,896	105, 287	Harrisourg City	50, 167 14, 230	39, 385 11, 872
Allentown city	35, 416	25, 228	Hollidaysburg boro	2,998	2,975
Altoona city	38, 973	30,337	Homestead borough	2,998 12,554	2,975 7,911
Apollo borough	2,924	2,156 4,032	Honesdale borough	2,864 6,053	2,816
Altentown city Altoona city Apollo borough Archbald borough Ashland borough Ashland borough	5,396 6,438 4,046 3,749 3,487 4,106 10,054	7,346	Hollidaysburg boro Homestead borough Honesdale borough Hunfingdon borough Indiana borough Jeannette borough Jermyn borough Jersey Shore borough Johnsonburg borough Johnstown city Kane borough	5, 035 4, 142 5, 865 2, 567 3, 070 3, 894 35, 936 5, 296 3, 846 3, 902	5,729 1,963
Ashley borough Athens borough Avoca borough Bangor borough Beaver Falls borough Bellefonte borough Bellevue borough Coll	4,046	3,192	Jeannette borough	5,865	3, 296
Athens borough	3,749	3,.274 3,031	Jermyn borough	2,567	2,650
Bangor horough	4, 106	2,509	Johnsonburg borough	3,070	1,853
Beaver Falls borough	10,054	9,735	Johnstown city	35, 936	21,805
Bellefonte borough	4,210	0, 340	Kane borough	5, 296	1,280 21,805 2,944 2,381
Bellevue borough (Colicounty) Bethlehem borough Belairsville borough Blairsville borough Bloomsburg town Braddock borough	3,416	1,418	Kingston borough	3,846	3,095
county)	3,916	2,701 6,762 3,126	Kittanning borough Knoxville borough	(Alte-	,,,,,,
Bethlehem borough	7,293	6,762	gheny county) 'Lancaster city Lansdale borough	1 3.511	1,723 32,011
Blairsville borough	3,386	3, 126 2, 452	Lancaster city	41, 459 2, 754 2, 630	32,011
Bloomshire town	6,170		Lansdowne borough .	2, 630	1,858 875
Braddock borough	15,654	8,561		4,888	4,004
Blairsville borough Blakely borough Blomsburg town Braddock borough Bradford city. Bridgeport borough (gomery county) Bristol borough Butler borough Canonsburg borough	15,029	10,514	Latrobe borough Lebanon city Lebighton borough Lewisburg borough Lewistown borough Lock Haven city Luzerne borough Lykens borough McKeesport city McKees Rocks borough McKees Rocks borough	4,614	3,589
gomery county)	MOH6- 3.097	2, 651	Lebighton borough	17,628 4,629	14,664
Bristol borough	7,104	2,651 6,553 8,734	Lewisburg borough	3, 457	2,959 3,248
gomery county) Bristol borough Butler borough Canonsburg borough	10,853	8,734	Lewistown borough	4,451	3, 273
		2,113 10,833	Lock Haven city	7,210	7,358
Carbondale city Carlisle borough	9.626	7,620	Lykens borough	3,817 2,762	2,398 2,450
Carnegie horough	7,330		McKeesport city	34, 227	20,741
Catasauqua borough . Chambersburg boroug	7,330 3,963 8,864	3,704 7,863			1,687
Charleroi borough	8,864	7,863	Mahanoy City boroug Mauch Chunk boroug	h 13,504 h 4,029	11,286 4,101
Chester city	5, 930 33, 988	20, 226	Meadville city	10, 291	9,520
Clearfield borough	5,081	2,248	Meadville city Mechanicsburg bor (Cumberland count	ough	
Coatesville borough	5,721	20, 226 2, 248 3, 680 10, 599	Media borough	y) 3,841 4 3,075	3,691 2,736
Columbia borough	12, 510	10,099	Meyersdale borough	3,024	1,847
Connellsville borough	7, 160				
Connellsville borough Conshohocken boroug	7,160 5,762	5,629 5,470	Media borough Meyersdale borough Middletown borough.	5,608	5,080
Connellsville borough Conshohocken borough Coraopolis borough Corry city	5, 762	5, 470 962 5, 677	Middletown borough. Millvale borough Milton borough	5, 608 6, 736 6, 175	5,080

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PENNSYLVANIA—cont	1900	1890	PENNSYLVANIA—cont	1900	1890
Minersville borough	4,815	3,504	Warren borough	8,043	4,332
Monongahela city	5, 173	4,096	Washington borough (₩ash-	
Mt. Carmel borough	13, 179	8,254	ington county)	7,670	7,063
Mt. Pleasant borough	4, 745 12, 116	3, 652 10, 044	Waynesboro borough. Waynesburg borough	5, 396 2, 544	3, 811 2, 101
New Brighton borough	6,820	5,616	Wellsboro borough	2,954	2,961
Newcastle city	28, 339	11,600	West Bethlehem boro	3,465	2,759
New Kensington boro.		10 501	West Chester borough	9,524	8,028
Norristown borough North Braddock boro	22, 265 6, 535	19,791	West Hazelton borough		931 3,906
Northumberland boro.	2,748	2,744	West Washington boro	2,693	3, 900
Oil City	13, 264	10,932	Wilkesbarre city	51,721	37,718
Old Forge borough	5,630		Wilkinsburg borough	11,886	4,662
Olyphant borough	6, 180	4,083	Williamsport city Williamstown borough	28,757	27, 132
Patton borough	2,529 2,651	2,412	Wilmerding borough.	2,934 4,179	2,324 419
Pen Argyl borough	2,784	2,108	Winton borough	3,425	1,797
Philadelphia city	1, 293, 697	1,046,964	York city	33, 708	20, 793
Philipsburg borough.	3,200	3,245			
Phoenixville borough Pitcairn borough	9, 196 2, 601	8,514	RHODE ISLAND,		
Pittsburg city	321,616	238, 617	Bristol town	6,901	5, 478
Pittsburg city	12,556	10,302	Burrillville town	6,317	5,492
Plymouth borough	13,649	9,344	Central Falls city	18, 167	
Pottstown borough	13,696	13, 285	Coventry town	5,279	5,068
Pottsville borough Punxsutawney boro	15,710 4,375	14,117	Cumberland town	13,343	8,099 8,090
Quakertown borough	3,014	2,792 2,169	East Greenwich town	8, 925 2, 775	3,127
Rankin borough	3,775		East Providence town	12,138	8,422
Reading city Renovo borough	78, 961	58,661	Hopkinton town	2,602	2,864
Renovo borough	4,082	4,154	Johnston town	4,305	9,778 20,355
Reynoldsville borough Ridgway borough		2,789 1,903	Lincoln town	8,937 22,034	19, 457
Rochester borough	4,688	3,649	North Kingstown town	4, 194	4, 193
Royersford borough	2,607	1,815	North Providence town	n 3,016	2, 084 27, 633
St. Clair borough	4,638	3,680	Pawtucket city	39, 231	27,633
St. Marys borough	4, 295 5, 243	1,745	Providence city Scituate town	175, 597	132, 146
Schuylkill Haven borc	3,654	3,088	South Kingstown town	3,361 4,972	3, 174 4, 823
Scottdale borough	4,261	2, 693 75, 215	Tiverton town	4,972 2,977 5,108	2,837
Scranton city	102, 026	75, 215	Warren town	5, 108	4, 489 17, 761
Sewickley borough Shamokin borough	3,568 18,202	2,776 14,403	Warwick town Westerly town	21,316 7,541 28,204	17,761
Sharon borough	8, 916	7,459	Woonsocket city	28 204	6, 813 20, 830
Sharpsburg borough. Sharpsville borough.	8, 916 6, 842	4,898		20,202	20,000
Sharpsville borough	2,970	2,330	SOUTH CAROLINA		
Shenandoah borough	20, 321	15, 944	Abbarilla tarre	0.500	
Sheraden borough Shippensburg borough	2,948 3,228 3,773	2 188	Abbeville town	3,766	1,696
Slatington borough	3, 773	2,188 2,716	Anderson city	5, 498	2,362 3,018
South Bethlehem bo	TO		Beaufort town	4,110	
(Northampton count	y) 13,241	10,302	Charleston city	55, 807	54, 955 2, 703 15, 353 -2, 389 3, 395
South Fork borough South Williamsport bo		1,295	Chester town	91 109	2,703
Spring City borough	2,566	2,900 1,797	Darlington town	3,028	-2 389
Steelton borough	12,086	9, 250	Florence city	4,647	3, 395
Stroudsburg borough. Summit Hill borough	3,450 2,986	2,419 2,816	Gaffney city Georgetown city	3,937	1,631
Sunbury borough	2,986 9,810	5,930	Greenville city	4,138	2,895
Susquehanna borough	3, 813	3,872	Greenwood town	3, 414 5, 498 4, 110 55, 807 4, 075 21, 108 3, 028 4, 647 3, 937 4, 138 11, 860 4, 824 4, 029	8,607 1,326
Tamaqua borough	3,813 7,267	3,872 6,054	Laurens town	4,029	2,245
Tarentum borough	5, 472 4, 215 8, 244	4,627	Newberry town		5, U2U
Taylor borough	4,215	9 079	Orangeburg city	4,455	2, 964 2, 744
Titusville city Towanda borough Turtle Creek borough	4 668	8,073 4,169	Spartanhurg dity	5, 485 11, 395	2,744 5,544
Turtle Creek borough	3, 262		Sumter city	5,673	3,865
Tyrone borough	4, 663 3, 262 5, 847	4,705 2,261	Orangeburg city	5,400	1,609
Union City borough	3,104	2,261			
Tyrone borough Union City borough Uniontown borough ette county)	7 3/4	6,359			
, . Colo Country)	m 1, 000	0,000	II.		

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SOUTH DAKOTA	1900	1890	TEXAS—cont.	1900	1890
Aberdeen city	4,087	3,182	Laredo city	73 459	11 310
Deadwood city	3, 498 2, 793 6, 210 2, 550	2,366 3,038	Longview town	13,429 3,591 4,342	11,319 2,034 2,489
Huron city	2,793	3,038	McKinney city Marlin town	4,342	2,489
Lead city	6,210	2,581	Marlin town	3.092	2,000
Madison city. Mitchell city Sioux Falls city Watertown city Yankton city.	4 055	1,736 2,217 10,177	Navasota town	7,855 3,857	7,207
Sioux Falls city	4,055 10,266 3,352 4,125	10, 177	Oak Cliff town	3,630	2,997 2,470
Watertown city	3,352	2,014	Oak Cliff town Orange city	3,835	3,173
Yankton city	4, 125	3,670	Palestine city	8, 297	5,838
7			Paris city	9,358	8,254
TENNESSEE.			Rockdale city San Antonio city	2,515	1,505
Bristol town	5 271	3 324	Sherman city	53,321 10,243	37,673
Brownsville city Chattanooga city	5, 271 2, 645	3,324 2,516 29,100	Sherman city Smithville town	2 577	7,335 616
Chattanooga city	30.154	29,100	Sulphur Springs town,	2,577 3,635	3,038
Clarksville city	9,431	7,924	Sulphur Springs town Taylor town Temple city Terreil city Texarkana city Tyler town Victoria city	4,211 7,065 6,330 5,256	2,584
Cleveland town	3,858	2,863	Temple city	7,065	4,047
Columbia town	6,052 2,787	5,370 1,067	Towarkana aity	6,330	2,988 2,852
Dversburg city	3,647	2.0091	Tyler town	9,200	6,009
Dyersburg city Fayetteville town	2,708	2,410	Victoria city	4,010	6,908 3,046
Harriman town	3,442	1 710	Waco city	20,686	14, 445
Humboldt town	2,866	1,837	Waxahachie town	4,215	3,076
Jackson city	14,511 4,645	10,039 4,161	Victoria city. Waco city. Waxahachie town Weatherford city. Yoakum town	3, 256 8, 069 4, 010 20, 686 4, 215 4, 786	3,369
Knoxville city	32,637	22,535	LOSKUIII WWII	3,499	1,745
Memphis city	102,320	64 495	UTAH.		
Morristown town	2, 973 3, 999	1, 999 3, 739 76, 168	American Fork city	0 720	ł
Murfreesboro city	3, 999	3, 739	Brigham city	2, 859	2,139
Pulacki town	80,865 2,838 2,899	76, 168	Eureka city	3,085	1,733
Johnson City town Knoxville city Memphis city Morristown town Murfreesboro city Nashville city Pulaski town Rockwood town Tullahoma town	2,899	2,219	American Fork city Brigham city Eureka city Lehi City	2,719	
Tullahoma town	2,684	2, 274 2, 305 2, 439			4,565
Union City town	3,407	3,441	Ogden city	16,313	14,889 2,850 2,135
+			Park City Payson city Provo City Salt Lake City Spanish Fork city Springville city	2,636	2,135
TEXAS,			Provo City	6, 185	5, 159
Abilene city	3,411	3, 194	Salt Lake City	53,531	44,843
Austin city	22, 258	14 575	Spanish Fork city	2,735 3,422	2,214
Beaumont city	9,427	3,296	Springville city	3,422	2,849
Abilene city Austin city Beaumont city Belton city Bonham town	3,700	3,000	VERMONT.		
Bonnam town	5,042	3,361		0.440	4 146
Bowie town	2,600 5,968	1,486 5,209	Barre city	- 8,448	4,146 2,666
Brenham city Brownsville city	6,305	6, 134	Barton town	3,346 2,790 4,337	2,217
Brownwood city	3,965	9 176	Bellows Falls village	4,337	3,092
Brownwood city Bryan city Calvert town	3,589	2,979	Bennington village Brandon town	5,656	3,971
Calvert town	3,322	2,632	Brandon town	2,759	3,310
Cameron city		1,608	Brattleboro village Burlington city	4,337 5,656 2,759 5,297 18,640 3,274 2,999 3,817	5,467 14,590
Corpus Christi city Corsicana city Crockett town Cuero town	4, 703	3, 278 4, 387 6, 285	Dorby town	3, 274	2,900
Corsicana city	9,313	6, 285	Fair Haven town Hartford town Lyndon town Middlebury town	2,999	2,900 2,791 3,740
Crockett town	2,012	1.445	Hartford town	3,817	3,740
Cuero town	3,422	2,442 38,067	Lyndon town	2,956	2,619 2,793 4,160
Denison city	42,638 11,807	10,958	Middlebury town	3,045 6,266	4 160
Denton city	4, 187	2,558	Montpelier city Morristown town	2,583	2,411
Cuero town Dallas city Denison city Denton city El Paso city Ennis city Fort Worth city Galnesville city Galveston city Georgetown town Gonzales city Green ville town Hillsboro city	15, 906	l 10.338	Nowport town	2 113	3.047
Ennis city	4,919	2, 171 23, 076	Northfield town Poultney town Randolph town	2,855 3,108	2,628
Goinosville eity	26,688		Poultney town	3,108	3,031
Galveston city	7,874 37,789	6, 594 29, 084	Randolph town	3,141	3,232
Georgetown town	2,790	2, 447	St. Albans city	6,239	
Gonzales city	4, 297	1,641	St. Johnsbury village	5,666	3,857
Greenville town	6,860	4,330	Springfield town	3, 432	2,881
		2,541	Swamton town	3,745	3, 231
Houston city	44,633 2,850	27,557	Rutland city St. Albans city St. Johnsbury village Springfield town Swarmon town Waterbury town West Rutland town	2,810 2,914	2,232 3,680
Corotoote (103	2,000	0,072	West Kunang wyn	2, 514	1 0,000

VERMONT.	1900	1890	WISCONSIN.	1900	1890
Winooski zdllogo		1 250			
Winooski village Woodstock town	3,783 2,557	3,659 2,545	Antigo city. Appleton city Ashland city Baruboo city Beaverdam city Beloit city Berlin city Burlington city Chippewa Falls city Deperer city.	5,145	4, 42
WOOdstock town	2,007	2,040	Ashland city	15, 085 13, 074	11,869 9,956
VIRGINIA.			Raraboo city	5,751	4,608
			Beaverdam city	5, 128	A 000
Alexandria city Berkley town Bristol city Charlottesville city Clifton Forge town Dovington town Dovington town Downille city Fredericksburg city Hampton town Lexington Lexingt	14,528	14, 339	Beloit city	10, 426 4, 489 4, 038 4, 038 17, 517 15, 117 15, 117 15, 117 15, 117 15, 117 15, 117 16, 118 16, 128 17, 186 11, 606 11, 606 11, 606 11, 786 11, 786 12, 581 13, 259 14, 240 15, 240 16, 240 17, 240 18, 24	6,31
Berkley town	4,988	3,899	Berlin city	4,489	4,149
Bristol city	4,579	2,902	Burlington city	2,526	2,048
Charlottesville city	6,449	5,591	Chippewa Falls city	8,094	8,670
Covington town	3,212	1,792 704	Depere city Eau Claire city Fond du Lac city	4,038	3, 62
Danwillo ofty	2,950	704	Eau Claire city	17,517	17, 415
Fraderickshurg city	16,520	10, 305	Fond du Lac city	15, 110	12, 02
Hampton town	9,000	4,528	Fort Atkinson city	0,040	2,28 1,70
Harrisonburg town	2,709	2,513 2,792	Grand Rapids city Green Bay city	18 684	9,069
Lexington town	3 203	3,059	Hudson city	3 259	2,88
Lynchburg city	18, 891	19,709	Hudson city Janesville city	13, 185	10, 83
Manchester city	9,715	9,246	Jefferson city	2,584	2, 28
Newport News city	19,635	4,449	Kaukauna city	5, 115	4,66
Norfolk city	46,624	34, 871	Vanache city	11,606	6,53
Petersburg city	21,810	22,680	La Crosse city	28, 895	25,09
ocahontas town	2,789	2, 953 13, 268	Lake Geneva city	2,585	2,29
Portsmouth city	17,427	13,268	Madison city	19, 164	13, 42
Padford of	2,813	2,112	La Crosse city Lake Geneva city Madison city Manitowoc city Marinette city	11,786	2, 29 13, 42 7, 71 11, 52
Pichmond city	3,344	2,060 81,388	Marinette city	16, 195	. 11,52
Rosnoka city	80,000	81,388	Marshfield city	5,240	3,45 4,58
salem town	21,495	16, 159 3, 279 6, 975 3, 354 5, 196 2, 570	Menasha city Menominee city	5,089	4, 58 5, 49
Staunton city	7 990	6 075	Merrill city	0,000	6 90
inffolk town	3 897	2 354	Milwankaa city	285 215	6,80 204,46
Vinchester city	5, 161	5 196	Mineral Point city	2 991	2, 69
Vytheville town	3,003	2,570	Monroe city	3, 927	2, 69 3, 76 5, 08
	-,	_,	Neenah city	5, 954	5,08
WASHINGTON.			Monroe city Neenah city New London city	2,742	2, 05 2, 72 5, 21 22, 83 2, 74 5, 14
			Oconomowoc city	2,880	2,72
berdeen town	3,747	1,638 1,173		5,646	5, 21
Saliard city	3, 747 4, 568 7, 838 4, 228 2, 608 6, 834 3, 154 3, 863 3, 443	1,173	Oshkosh city Oshkosh city Platteville city Portage city Port Washington city Prairie du Chien city	28, 284	22,83
Poinbawon ofty	7,838		Platteville city	3,340	2,74
Januaren City	4,228	4.076	Portage city	5,459	5, 14
Joy Whatcom city	6 834	1,302 4,827 1,535 4,698 4,558	Port Washington City	9,010	1,65
Jorth Vakima city	3 154	1 535	Racine city	90 102	3, 13 21, 01
lympia city	3, 863	4,698	Rhinelander city	4 998	21,01
ort Townsend city	3, 443	4,558	Rice Lake city	3,002	2, 65 2, 18
berdeen town salland city Forest city 'Cairhawen city doquiam city 'North Yakima city 'Ort Townsend city 'Ort Townsend city 'Oslyn town leattle city 'pokane city 'acoma city 'Ancouver city 'Yancouver city 'Vallawalla city	3, 443 2, 786 80, 671	1,484	Ripon city	3, 818	3,35
eattle city	80,671	42,837	Sheboygan city	22, 962	16.35
pokane city	36,848 37,714 3,126	19,922	Sheboygan city South Milwaukee city	3,818 22,962 3,392	
acoma city	37,714	36,006	Sparta city Stevens Point city	3,555	2,798
ancouver city	3, 126	3,545	Stevens Point city	9,524	2,795 7,896
valiawalia city	10,049	1, 484 42, 837 19, 922 36, 006 3, 545 4, 709	Stoughton city	3, 392 3, 555 9, 524 3, 431 3, 372	2,470
WEST VIRGINIA			Sturgeon Bay city	3,372	2, 195
WEST VIRGINIA			Superior city	31,091	
enwood city	4,511	2,934 1,775 6,742 3,008	Tomah city	2,840 3,784	2, 199 2, 870
luefield city	4, 644 11, 099 4, 050 5, 655 5, 650	1,775	Two Rivers city	8, 437	8,75
luefield cityharleston city	11,099	6,742	Watertown city	7,419	6, 32
larksburg town	4,050	3,008	Waynege city	2,912	2, 12
airmont city	5,655	1,023	Wainin city	3 185	2 75
rafton city	5,650	3, 159	Wansan city	12, 354	2,75 9,25
linton city	3,763	2,570	Wanwatosa city	2, 842	0, 20
larkeson city larksburg town airmont city trafton city linton city luntington city ceyser town foundsville city spreasure city	11, 923	1,025 3,159 2,570 10,108 2,165 7,226 2,689 8,408	Stevens Point city. Stoughton city. Sturgeon Bay city. Superior city Tomah city. Two Rivers city Watertown city. Waukesha city. Waupaca city. Waupun city Wausau city. Wauwatosa city Whitewater city.	3, 185 12, 354 2, 842 3, 405	4,35
leyser town	2,536	2,165		-, -,-	_, 00
larunsburg town	7,064	7,226	WYOMING.		
ioundsville city	5, 362	2,688			
arkersburg city	11,703	8,408 469	Cheyenne city	14,087	11,69
Volleburg oity	2,979	2, 235	Laramie city	14,087 8,207 4,363	6,38
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A FEW TEST AND REVIEW QUESTIONS

The following series of questions will tend to fix in the mind of the reader much of the valuable information contained within the pages of this book.

All of the subject matter of the book is not covered by the questions, nor indeed could it be without greatly enlarging the size of the volume, for its pages literally teem with important facts and figures of the most practical value, not only to the business man, but to the student, teacher, farmer, mechanic, lawyer, and statesman.

To those who have not familiarized themselves with the contents of the book, this partial list of questions will serve to show what a valuable aid this compact little ready-reference manual must be in solving the many puzzling problems that are constantly presenting themselves for solution in the practical every day business life of busy people.

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BUSINESS DICTIONARY.

Abandonment. - In marine insurance the giving up of property partly destroyed, by the owner to the in-

Abatement.—A discount allowed for damage or overcharge, or for the payment of a bill before it is due. Abolish .- To make void; to cancel.

Acceptance.-In mercantile law, the act by which the person upon whom a bill of exchange or other order is drawn engages to pay it: the bill itself after it has been accepted,

Acceptance for Honor. — An acceptance made after a bill has been protested for non-acceptance for the honor of the drawer or any indorser.

Acceptor .- One who accepts an order or draft or bill of exchange.

Accommodation Paper.-Commercial paper for which no consideration passed between the original parties; also a note to which a party has put his name to accommodate another who is to provide payment when due

Acknowledgment .- The act by which a party who has executed an in-strument declares or acknowledges it before a competent officer to be

his or her act and deed.

written or Account. - A statement of debits and credits in

any business transaction.

Account Current.—A detailed state-ment of the transactions between parties for a certain period, show-ing the condition of affairs at the

current or present time.

Account Sales. — A detailed statement of a commission merchant to his principal, showing his sales, the expenses attending the same

and the net proceeds:

Accountant. - A person trained to keep accounts.

Actionaire .- The owner of shares in a stock company; a stockholder. Action.—The formal means of recov ering one's rights in a court of

justice: a suit.

Act of God.—Any accident produced by a physical cause which is irre-sistible, such as lightning, hurri-

canes, earthquakes, etc.

Actuary.—A registrar or clerk; generally applied to the manager of a life insurance company.

Administrator .- A person appointed to settle the estate of a testator or to manage an intestate estate.

Admiratty.-The power that controls naval affairs in Great Britain. Court of Admiralty—A court which decides questions of maritime. justice.

Adulteration .- The debasing of an article or substance by spurious or

less valuable mixture.

Ad valorem .- According to value. Advance.-A rise in price: additional profits; stocks above par.

Adventure.- Goods sent to sea at the

owner's risk: a speculation.

Adventure in Co.—Goods sent to be sold on joint account of shippers and consignee.

Advice .- Admonition or suggestions offered, usually in regard to buy-

ing and selling goods. Affida it. - A statement

made upon oath.

Affreight.—To hire, as a ship, for transporting freight.

Affreightment.-The hiring of a ship for the conveyance of goods.

Agency.-The relation existing between two parties by which one is authorized to do certain business for another, with other parties

Agent.—Any person who is employed by another to do business or in any way act for him.

Age of Consent .- The age at which young persons are capable of making a valid contract of marriage.

Agio.—A term used to denote the

difference between the real and nominal value of money

nominat value or money.

Alimony. An allowance made to a
wife out of her husband's estate
during a suit for divorce or separation, or, at its termination, for
her life or for a shorter period

Allonge.-A paper attached to a bill of exchange, when there are too many indorsements to be con-tained on the bill itself.

Amotion. Removal of an officer of a corporation. Allowance. A deduction made, for instance, from the gross weight of

goods. Anker.—A common liquid measure, varying in different European countries from nine to ten gallons.

Antal .- A wine measure of Hungary holding about thirteen and a half gallons

Anticipate.—To be before in doing, or pay before due.

Ante-dated .- Dated at a time earlier than the actual date. Annulment. - The act of making

void.

Appraise .- To set a value on goods or property.

Appurtenance .- Adjunct of appendage to property.

Arbitration.—The investigation and decision of a cause or matter between parties in controversy, by

chosen persons

Arbitration of Exchange.—The deduction of a proportional or arbitrated rate of exchange between two places, through an Intermediate place, to ascertain the most advantageous method of drawing or remitting.

Arrear .- That which remains un-

paid, though due.

of Copartnership. - The written agreement by which a copartnership is formed.

Assay .- To subject an ore to chemical examination to find the amount of any metal contained in it.

Assess.—To fix a certain value for the purpose of taxation.

Assets.-Property available for the payment of debts; also the entire property of an individual or company.

Assignee.—The person to whom the failing debtor transfers all his remaining property for the purpose of having it distributed among his creditors; one to whom anything is assigned.

Assignment.—A transfer of a failing debtor of his property to an assignee; a transfer by one person to another of any property, personal

or real.

Assignor .- One who assigns property

Association .- The union of a number of persons for some special purpose.

Attachment .- A seizure by virtue of a legal process.

Attorney (Power of).—A written authority from one person empowering another to act for him.

Auctioneer .- One who sells goods at Public sale.

Auditor .- A person appointed to examine and settle accounts.

Avails. Profits of property disposed of; proceeds of goods sold

Average. - A proportional share of a general loss; also a mean time of payment for several debts due at different times.

Avoirdupois .- Commercial standard of weight in the United States and

England.

Award.-Decision of arbitrators.

В

Bail .- The security given for releasing a person from custody.

Bailee.—The person to whom goods

are intrusted Bailment.—A delivery of goods in trust upon a contract that the trust shall be faithfully executed on the part of the bailee.

Bailor .- One who intrusts goods to

another.

Balance.—The excess on one side. or what added to the other makes equality in the account.

Balance Sheet.—A statement in con-

densed form showing the condi-

tion and progress of business. Ballast.—Any heavy material placed in the hold of a ship to steady it in the water

Banco .- A commercial term used in Hamburg to distinguish bank money from common currency.

Bank Bill. - A written promise to pay to the bearer on demand a certain sum of money, issued by a bank and used as money.

Banking.—The business of a banker, or pertaining to a bank.

Bank Note.—Same as bank bill.

Bankrupt.—An insolvent; one who is

unable to pay his debts.

Bankruptcy.—The condition of one who is unable to pay his debts as they fall due.

Bank Stock.—Shares in the capital stock of a bank.

Barratry.—Any breach of duty committed by the master of a vessel or the seamen, without the consent of the owner, by reason of which the ship or cargo is injured

Barque. - A three masted vessel carrying no square sails on her mizzen

mast

Barter.—To trade by exchange of goods, in distinction from trading

by the use of money.

Bazaar.-- A word of Eastern usage, signifying a place of exchange, or general market place; a repository of fancy articles, especially of dress.

Beacon.—A signal light for the guid-ance of mariners; usually erected and sustained by the Government... Beneficiary.—In life insurance, the

person to whom a policy is made payable; the person for whose benefit another holds the legal title to real estate.

Beyond Seas .- Denotes absence from the country, and generally held to mean absence from the particular

State.

Bidder.-One who bids or offers a price.

Bill .- A name given to statements in writing; as goods, a note, a draft; a law not enacted; exhibition of

charges

Bill of Exchange.-A direction in writing, by the person who signs it, to another, to whom it is addressed, to pay to a third person a definite sum of money at a specified time.

Bill of Lading .- A written statement by a common carrier to one send-ing goods by him, acknowledging that they have been received by him, for transportation, with terms of shipment; it is both a receipt and a contract.

Bill of Parcels .- A detailed account

of goods sold.

Bill of Sale.—A formal instrument for the transfer of goods and chat-

tels.

Blank Indorsement .- One in which no particular person is named as the one to whom payment is to be made: it consists of the indorser's name only.

Board of Trade. - An association of business men for the advancement of commercial interests.

Bona Fide .- In good faith; in reality. Bond .- A written and sealed instrument binding a person and, in more cases, his heirs to fulfill certain obligations

Bonded Goods,-Goods in charge of the officers of customs the duties on which bonds are given at the

custom house.

Bonus .- A premium or extra sum for a loan, a charter, or other privilege. Book-Debt .- An entry or charge on a ledger; called also an open account, in contradistinction to a written

promise or note. Bottomry Bond .-- An obligation given for a loan upon a vessel and

accruing freight.

Breach .- In the law of contracts, the violation of an agreement or obligation.

Breakage.-An allowance made by the shipper or seller on certain descriptions of fragile goods.

Broker .- A person who transacts business for another, commonly in stock, money, etc., using the name of his principal.

Brokerage.—The fee charged for

transacting business by a broker. Bulls and Bears .- Persons engaged

in the gambling transactions of stock exchange; the bulls are personally interested in tossing up the prices of certain goods, while the bears are fighting to pull down prices.

Bullion .- A commercial name for uncoined gold or silver.

By=Bidder.—A person employed at auctions, in order to raise the price of articles to be sold.

By-Laws.-The private laws made by a corporation for its own gov-

ernment.

Capital .- The stock employed in trade; the fruit of past labors saved. Capital Stock .- The fund or property, as a whole, contributed, or supposed to have been contributed, to a corporation at its organization, as its property.

Carat .- An imaginary weight that expresses the fineness of gold.

Cargo .- A ship's lading or freight. Cashier .- One who has charge of money and superintends the receipts of payments.

Caveat Emptor.—A Latin phrase, meaning, "let the purchaser be-ware," and applies to a case in which the thing sold is before the buyer and he examines it.

Centage.-A rate by the hundred Certified Check.—A check which has been certified by the bank on which it is drawn, making the bank absolutely responsible for its payment.

Certificate.—A certificate issued by a bank or banker, showing that a certain sum of money has been deposited there, payable to a certain person, or to his order, or to the bearer. the bearer.

Certificate of Stock,—A certificate given by the proper officers of a corporation, showing that a certain person owns a certain number of

shares of the capital stock.

Certification (of check).-The signature of the proper officer of the written across the face of the check, sometimes with and sometimes without the word "cer-tified" or "good."

Chancellor.—The chief judge of a

court of chancery or equity.

Charter .- An instrument in writing from the sovereign power or legislature, conferring certain rights or priviléges.

Charter Party .- The written instrument by which the owner of a vessel lets it, or a part of it, to another.

Chattel Mortgage.—A conditional sale of personal property, one which is to become void if a certain thing happens; chiefly used as the security for the payment of money.

Chattels.-Commonly means goods of any kind, or every species of personal property.

Check .- A written order for money dr wn upon a bank or banker, and

payable immediately.

Choses in Action.—Things of which the owner has not possession, but merely the act of legal action or possession, as notes, accounts, etc. Choses in Possession.—Things in

possession of the owner; circulating medium—cash and bank notes payable on demand; the medium of exchange

Civil Law.—The system of law of ancient Rome.
Civil Remedy.—The method of re-

dressing an injury inflicted by one upon another by legal person measures.

Clearance .- Permission from a custom house officer for a ship to sail.

Clearing House.—A kind of banking exchange for the convenience of daily settlements between banks.

Clerical Error .- An error in calculating or other accidental error on books or documents.

Collateral .- Property pledged as security for the performance of a contract.

Commerce .-- The exchange of merchandise on a large scale.

Commercial Paper .- Bills of exchange, drafts or promissory notes given in the course of trade.

Common Carrier.-One who, as a business, undertakes for hire to transport from place to place passengers or goods of all who choose to employ him.

Coasting.--Sailing near land, or ves-

sels trading between parts of the

same country.

Codicil .-- A supplement to a will. Common Law .-- The unwritten law, as distinguished from written or statute law; the old law of England, that derives its force from long usage and custom.

Commission .-- The brokerage or allowance made to an agent or factor for doing business for an-

Competency.-The legal fitness of a witness to give evidence on the

trial of an action.

Composition Deed.-An agreement between an insolvent debtor and his creditors by which, upon payment to each of some fixed proportion of his claim, they all agree to release the debtor from the balance of their claims.

Compromise.-An agreement tween a debtor and his creditors by which they agree to accept a certain proportion of the amounts due, and discharge him from the remainder.

Concurrent .- Existing together: consideration is concurrent when the acts of the parties are to be performed at the same time.

Condition Precedent.—An act which must be performed by one-person before another is liable, or in order

to make him liable.

Cooperage.-Charges for putting hoops on casks or bales

Consideration.—The reason for in-ducement in a contract upon-which the parties consent to be bound.

Consignee .- One to whom merchandise, given to a carrier by another person for transportation, is directed.

Consignor .- One who gives merchan. dise to a carrier for transportation to another.

Compact. A covenant or contract between different parties. Company.—A number joined together to undertake some common enterprise.

Compound .- To adjust by agreement differently from the original terms;

to settle by compromise.

Compromise. - A friendly settlement of differences by mutual concessions. Consignment .- The act of consign-

as charge for safe-keeping, and management, as goods, property, etc.

Consul. A person commissioned to reside in a foreign country as an agent of the Government. Contraband .- Prohibited merchan-

dise or traffic.

Contract .- To make an agreement; to covenant.

Conveyance,-The act of carrying by land or water; the means of con-veyance; a written instrument by which an estate in lands is trans-

ferred from one to another. Copartnership .- A joint interest in

business

Corporation .- An artificial person created by law consisting of one or more natural persons, united in one body, and endowed with the capacity of perpetual succession, and of acting in certain respects as a natural person.

Counter-Claim.—Same as set-off; one

debt or claim to set off another

Counterfeit. To copy or imitate without authority, with a view to

defraud; a forgery.

Countersign .- To sign in addition to the name of a superior that of the secretary or subordinate officer, as bank notes are signed by the presipent and countersigned by the cashier.

BUSINESS DICTIONARY

Coupon .- An interest warrant printed at the ends of bonds, to be cut off when the interest is paid.

Course of Exchange.—The current

price of bills of exchange between two places.

Covenant. - Any compromise contained in a sealed instrument.

Covenantee .- The person to whom

the promise is made.

Coverture.—The legal state and condition of a married woman, being considered as under the shelter and protection of her husband.

Credentials.—Testimonials or certifi-

cates showing that a person is en-titled to credit, authority or offi-

cial powers.

Credit.—Trust given or received; mercantile reputation entitling one to be trusted; also the side of an account on which payment is entered.

Credito .- One to whom money is

due.

Curb-stone Brokers .- A term applied to a class of stock operators in New York who do business on the sidewalk or pavement.

Currency .- That which circulates as a representative of value.

Customs.—Customary toll, tax, or tribute on imported or exported goods.

Custom House .- A building where duties are paid and vessels entered and cleared.

D

Damages - A compensation, usually

in money, to one party for a wrong done him by another.

Days of Grace.—Days (usually three) allowed by custom for the payment of bills and notes beyond the day expressed for payment on the face of them.

Debase .- To lessen in value by adul-

teration.

Debenture.—A certificate given by the collector of a port of entry to an importer for drawback of duties on imported merchandise, which, when the merchandise is exported, are to be refunded.

Debit .- A recorded item of debt, also the debtor side of an account.

Debt .- That which is due from one

person to another

Debtor.—The person who owes another, either money, goods or serve ices.

Deed .- A sealed instrument in writing used to transfer property,

usually real'estate.

Default.—Omission, neglect or fail-

Defaulter .- One who fails to discharge a public duty, as to account for money intrusted to him.

Defalcation .- A diminution; deficit. Defense .- The answer made by the defendant to the plaintiff's action, by demurrer or plea at law

Del Credere .- A commercial term implying a guarantee of the solvency

of the purchaser,

Delivery,—Giving money or goods to another.

Demand.—A peremptory urging of payment of a claim and exaction. Demise. To convey, to bequeath by will.

Demurrage.-Allowance for deten-

tion of a ship.

Deposit.—A delivery of goods to be kept and returned without recompense.

Depository.-A trustee, one to whom something is committed for safekeeping; also the place where such deposited goods are kept in store. Deputy.—One appointed to act for

another; a representative or dele-

Diplomacy.-The science of conducting negotiations between nations. Deviation,—In the law of marine in-

surance, a voluntary departure without necessity from the regular course of the specific voyage insured.

Discount .- An allowance or deduction made for the payment of money before it is due.

Discount Days.—The days of the week on which the directors of a bank meet to consider paper offered for discount.

Disability .- Want of qualification:

incapacity to do a legal act.

Disaffirmance.—The annulling or canceling of a voidable contract. Disfranchisement.-Expulsion of a

member from a corporation.

Dishonor .- The non-payment of ne-

gotiable paper when due. Distress.—The taking of personal property to enforce the payment of something due, as rent,

Divorce. - The separation of husband

and wife by the sentence of law.

Dividend. -- A percentage of profits paid to stockholders.

Domestic Relation.—The relations of the members of a household or family.

Dence.—The person to whom a gift

or donation is made.

Doner .- One who confers anything gratuitously

Dermant. -Silent partner, one who takes no share in the active business, but shares profit.

SAFE METHODS

Drawback .- Money paid back on goods exported, a part or the whole of the duty charged.

Draft -An order from one man to another directing the payment of money, a bill of exchange.

Drawee .- The person upon whom a bill of exchange is drawn, who is directed to make the payment.

Drawer .- The person who draws or makes a bill of exchange.

Dress Goods .- A term applied to fabrics for the garments of women and children, usually of mixed materials, such as silk and cotton, silk and worsted, etc.

Due Bill .-- A written acknowledgment of debt; not transferable by mere indorsement.

Dun .- To press urgently the payment of a debt,

Duplicate .- A copy or counterpart of

anything.

Duress. Personal restraint, or fear of personal injury or of imprisonment; it nullifies all contracts into which it enters.

Duties .- A tax levied by the Government on imported goods; money paid to the Government on imported and exported goods.

Earnest .- Something given by the buyer to the seller, to bind the bargain and prove the sale.

Easement .- The right to use another's land.

Effects .- All kinds of personal prop-

erty. Ell. - An English measure of length equal to 14 yards; the Scotch ell is 1 3-100 yards.

Embargo.—A detention of vessels in

port; prohibition from sailing. Embarrassment.-Perplexity arising

from insolvency or temporary inability to discharge debts.

Embassy.—The public business intrusted to diplomatic officers.

Enact.-To make a law or establish by law.

Engrosser.-One who buvs large quantities of any goods in order to control the market.

Embezzlement .- To appropriate public money to private use by a breach of trust.

Emporium .- A place of extensive commerce, a market place,

Emblements .- Growing crops of any kind produced by expense or labor.

Eminent Domain .- The right of sovereign power to take private property for public purposes.

Equity of Redemption.—The right which a mortgagor has to redeem his estate after the mortgage has come due.

Endorse.-To endorse

writing the name on the back.
Entrepot.—A bonded warehouse; a storehouse for the deposit of

goods; a free port.

Equity.—A system supplemental to law, qualifying or correcting it in

extreme cases

Escrow.—A deed or bond delivered by a third party to be held or de-livered to the guarantee or creditor upon the performance of some condition.

Estate.-The degree, quantity, nature, or extent of interest which a person has in real property.

Estoppel.-A stop, a bar to one's alleging or denying a fact contrary to his own previous actions, alle-gation or denial.

gation or denial.

Exchange.—Act of bartering; a bill drawn for money; a place where merchants meet; difference between the value in two places, or premium or discount arising from purchase or sale of goods.

Executed (of a contract).—Finished. Excise.—Taxes or duties on articles produced and consumed at home;

internal revenue tax.

Execution .- A written command issued to a sheriff or constable after a judgment directing him to enforce it; the act of signing and sealing a legal instrument, or giving it the form required to make it a valid act.

Executor .- The person appointed by a-testator to execute his will

Executory .- To be executed in the future.

Exports .- That which is carried out of a country, as goods and produce in traffic.

Express .- A courier: also regular and quick conveyance for packages, etc.

Face.-The amount expressed on a note or draft.

Factor .- An agent who sells and buys in his own name, being entrusted with the goods, in this respect differing from a broker.

Facture .- An invoice or bill of parcels.

Failure. - Becoming bankrupt, suspension of payment.

Fac-simile. - An exact copy or likeness.

Favor .- A note or draft is said to be in favor of the payee. Fee Simple. - Full ownership in land:

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BUSINESS DICTIONARY

Feud .- An estate in land held of a superior by service; a fief.

Feudal System .- The system of feuds or fiels as existing, especially during the middle ages.

Finance.-Revenue, public money, income

Financier. One skilled in financial operations: a treasurer.

Firm. All the members of a partner-ship taken together, a business house or company, the title used

by a business house. Firkin. - A measure of capacity: the fourthpart of a barrel, or eight or

nine gallons.

Fiscal.—Pertaining to the public

reasury or revenue.
Fixtures. - The part of the furniture of a store or office which is not movable, as gas pipes or burners, partitions, etc.

F.O.B.-Free on board; the bill or invoice with F. O. B. includes the transporting to the shipping port and all the shipping expenses.

Foreclose.—To cut off by a court judg-

ment from the power of redeeming

mortgaged property.

Foreclosure. - The process of cutting off the right or interest of the mortgager and his assignees in mortgaged premises.

Forestall.—To buy goods on their way to market, intending to sell

again at a higher price.

Forfeiture. - A loss of property, right or office, as a punishment for an illegal act or negligence; sometimes used for the thing forfeited.

Folio,-A page in an account book; sometimes two opposite pages bearing the name serial number.

Franc.-A silver coin used in France equal to about nineteen cents. Frank .- To exempt from charge of

portage. Fraud. - A cunning deception or arti-

fice to cheat or deceive another. Free Trade.-The policy of conducting international commerce with-

out duties. Freehola.-Land held by free tenure.

or in fee simple, subject to no su-

perior or conditions. Freight .- Merchandise being moved from one place to another; the price paid for carrying freight; also a load or burden.

Funded.—Turned into a permanent loan, on which annual interest is paid.

Funds .- The supply of money or the

capital.

Forgery.-The fraudulent making or altering of a written instrument.

G

Gain .- Advantage, acquisition, accu-

mulation, profit.

Garbled.—Drugs, spices or other goods which have been sorted or picked over and freed from impurities.

Gauging .- Measuring the capacity of

casks, etc.

General Average.—A contribution made by the owners of a vessel and cargo toward the loss sustained by one of their number, whose property has been sacrificed for the general safety.

General Ship .- A vesser navigated by its owner, receiving and carrying freight indifferently for all who

apply.

Gist.—The principal point of a question, the pith of the matter.

Go-between .- Agent for both parties. Goods -Same as chattels and effects. Good Will .- Benefit arising from the successful conduct of business by a certain person or firm, usually in a certain place; it is a property subject to transfer.

Grant - A transfer of a property by deed; a conveyance made by the

Government.

Gross .-- Twelve dozen.

Gross Weight.—Weight of goods in-cluding dust, dross, bag, cask, etc. Guaranty (or guarantee).--A contract whereby one person engages to be answerable for the debt or default of another person.

Quarantor .- He who makes a guar-

ants

Guardian.-One who has the care of the person and property of an or-. phan or other person.

Habeas Corpus .- A writ to bring a party before a court, to prevent false imprisonment.

Haberdasher.—A seller of wares, as thread, pins, etc.

Hand-book .- A book of reference; a manual.

Hand-money .- Money paid the purchaser at the closing of a contract or sale.

Harbor.-A port or haven for ships. Haven .- A port or shelter for ships, a

harbor High Seas .- The uninclosed waters of the ocean outside the boundaries

of any country. Hollow Ware. A trade name for camp and kitchen utensils made of cast-iron or wrought-iron.

Honor .- To accept and pay when due.

Husbandage.-An owner's or an agent's commission for attending to a ship.

Hypothecate.-To pledge for the security of creditor.

Infant .- In law, one under the age of twenty-one years. Impolite.—Wanting in prudent man-

agement; not politic

Import .- To bring in from abroad or a foreign country.

Importer.-The merchant who imports goods.

Imposition.—Tax, toll, duty or excise prescribed by authority.

Impost .- A tax or duty imposed on imported goods. Indemnify. To recompense for loss,

to reimburse. Indenture .- A mutual agreement in

writing.

Indorsement .- A writing on the back of a note.

Indorser .- The one who makes the indorsement.

Indorsee .- The person in whose favor the indorsement is made.

Injunction. - An order or direction of the court compelling a certain person to refrain from doing some particular act or thing.

Indulgence —Extension of time of
 payment; forbearing to press for payment.

Inland Bills .- A draft or bills of exchange drawn on a party in the same as the drawer.

insolvency.-Inability to discharge debts when due.

Insurance.-Indemnity from loss; the premium paid.

Installment .-- Payment of parts at different times

Interest .- Premium paid for the use of money.

Internal Revenue .- The part of the revenue of our Government which is collected in the form of internal duties

Intestate.-Without a will. Invalid .- Of no legal force.

Inventory.—A list of merchandise made periodically for the purpose of knowing the quantity and value of unsold goods, in order to ascertain the condition of business.

investment .- The laying out of money in the purchase of some species of property.

Invoice.—A written account or bill of merchandise bought; a bill of items.

Jettison .- Throwing goods overboard in case of peril, to lighten and preserve the ship.

Joint Stock .- Stock held in company; a species of partnership.

Joint Tenancy. - Joint occupancy; not so close intimacy as partner-

ship. Journal.—A book used to classify and arrange business transactions. Judgment.—The sentence of the law pronounced by the court upon any matter contained in the record, or

in any case tried by the court.

Judgment Debtor. - Party against
whom a judgment is obtained.

Judgment Note.—A note in the usual form, with the addition of the power to confess judgment if not paid when due.

Jurisdiction .- The power of exercising judicial authority.

Kilogram.—The French measure of weight, equal to 2½ lbs. avordu-pois, or 1000 grains. Kiting or Kite i lying.—Exchanging checks on different banks, for the

purpose of obtaining the use of money for a single day.

Lame Duck .- A stock broker's term for one who fails to meet his engagements.

Landlord .- One who owns and rents or leases lands or houses; a hotelkeeper.

Larceny.— Theft: taking personal property belonging to another.

Law Merchant.—The general body of usages in matters relative to commerce.
Lay Days.—Days allowed for loading

and unloading a cargo.

Lay Down.—A phrase used to express the entire cost of a commodity, including transportation, etc., at a place remote from its production or purchase.

Lease.—A contract by which one grants to another for a period the use of certain real estate.

Legal Tender.—That kind of money

which by law can be offered in payment of a debt.

Legacy.- A gift by will of personal property.

Ledger .- A book in which a summery of accounts is preserved.

essee.—One who takes an estate by a lease.

BUSINESS DICTIONARY

Letter of Credit .- A letter authorizing credit to a certain amount to be given to the bearer; also a written direction by some well-known banker to someone to draw upon him for any amount he chooses up to a specified limit.

Liability.—Obligations, debts.

Libel.—To defame by public writing,

printing, signs, or pictures.

License.—A grant or permission by the authorities.

Lien .- A legal claim on property for debt.

Liquidate.-To clear off; to settle; to

pay as debts.

Lloyds.—A marine insurance association in London. The records of this society contain a complete history of the sea, so far as con-cerns the number of shipwrecks, collisions, fires, piracies, mutinies,

Litigation.—The act of litigating; judicial contest; a suit at law.

Loan .- A thing furnished to another temporary use, on condition that it be returned.

Long Price.-Price after the duties are paid.

M

Malfeasance.-Evil conduct; illegal

Maintenance.-Support by means of food, clothing and other conveniencies.

Mandate.—A bailment of personal property in which the bailee undertakes without compensation to do some act for the bailor in respect to the thing bailed.

Mandatory.—A person to whom a charge is given or business intrusted.

Manifest .- An invoice of a ship's cargo

Manufacture.- The process of reducing raw material into a form suitable for use.

Marine —Relating to the ocean;

Maritime Law.— Law relating to

harbors, ships, seamen

Marc. - A weight of gold and silver, used as a measure of these metals in Europe.

Mart.-A commercial center: a market place.

Maturity.—The date when a note or draft falls due or is payable.

Mercantile Law.-Law pertaining to trade and commerce.

Merchandise.-Whatever is sold or bought in trade.

Merger.—The absorption or extinguishment of one contract into another.

Metallic Currency.—Silver and gold coins, forming the circulating medium of a country.

Minor .- Same as infant: a person under twenty-one years.

Misfeasance .- A trespass: doing improperly an act that might be done lawfully.

Misdemeanor.—A lower kind of crime; an indictable offense not amounting to felony.

Mitigation.—The abatement of a

judgment, penalty or punishment.

Money.—Coin; any currency law-fully used instead of coin, as bank-

Money Broker .- A broker who deals in money.

Monopoly. Sole permission or appropriated power to deal in any species of goods.

Monetary.—Pertaining to or consist-

ing in money.

Mortgage. - A grant or conveyance of an estate or property to a creditor, for the security of a debt, and to become void on payment of such

Municipal.-Of or belonging to a

Municipal Law. - The system of law of any one nation or State. Muster .- A collection of samples.

N

National Banks.—Banks organized under the conditions of an act of Congress; they can issue banknotes only to the amount of United States Bonds they have deposited in the U. S. Treasury; the object is to unify the currency.

Navigation .- The science of conduct-

ing vessels on the ocean

Negotiable.-Transferable by assignment or indorsement to another per-

Negotiate.—To transact business; to hold in intercourse in bargain or trade.

Negotiable Paper .- Notes, bills and drafts which may be transferred with all their rights by indorsement or assignment.

Net .- Clear of all charges and deductions.

Net Profits .- Clear profit after de-

ducting losses.

Net Weight.—Weight of merchandise without bag, box or covering. Nominal .- In name only, very small,

as a nominal price. Non-feasance. -An omission of what ought to be done.

Note .-- A written or printed paper acknowledging a debt and promising payment.

Note Book .- A book in which notes of hand are recorded.

Notarial Seal .- Seal of a notary publie.

Notary Public.—A public officer who attests or certifies to acknowledgments of deeds and other

papers, protests notes and bills. National Currency. National bank bills.

National Damages .- Those given for the violation of a right from which no actual loss has resulted.

Nonuser .- A failure to use rights and privileges.

Obligation .-- A duty; a binding engagement: a bond with a condition annexed.

Open Account. - A running or unsettled account with an individual or

Open Policy .- An insurance policy covering undefined risks, which provides that its term shall be-come definite by subsequent additions or indorsements.

Option.—Permission to choose; a stockholder's term for the privilege of taking or delivering at a future day a certain number of shares of a given stock at a price agreed upon.

Order .- A commission to purchase; direction to pay money or to deliver goods.

Order Book .- A book in which orders

received are entered. Ordinary.—A ship in harbor is said to be in ordinary; of medium

quality. Ordinance.-A rule, or order, or law;

usually applied to the acts or laws passed by the common council of a city.

Ordnance.-All kinds of large guns. Outlawed .- A debt is said to be outlawed that has existed for a certain length of time, after which the law, on that ground alone, prevents its being enforced.

Ostensible Partners.—Those known

to the public.

Outstanding Accounts. - Book debts not yet collected.

Outstanding Debts.—Unpaid debts. Overdraw.—To call for more money than is on deposit.

Overdraft .- A check paid above the amount on deposit.

Overdue.—Applied to a note or draft, the specified time for payment of which has passed.

Overt .- Apparent, manifest; open. Owe .- To be obliged to pay.

Panic .- A financial crisis among business men; a monetary pressure; generally the result of overtrading and speculation.

Paper Money .- Bills of banks or of the Government passing current

as money.

Par. - State of equality in value, equality of nominal and actual value.

Parol.--Oral declaration: word of

mouth. Par Value .- The face or nominal

value of a commercial paper.

Par of Exchange.—The value of a unit of one country's coinage expressed in that of another's.

Partner .- An associate in business; member of a partnership.

Partnership.—Contract of two or more persons to join money, stock or skill in trade for mutual benefit.

Part Owner -One of several owners of a ship; the relation differs materially trom partnership.

Pass Book .- A book kept by a customer in which entries of purchases is made; a bank book.

Passport.-A permission from a Government to travel, with identification and certificate of nationality; a document carried by neutral merchant vessels in time of war for their protection.

Pawnbroker.—One who holds money at interest on security of goods deposited.

Payable.-Justly due; capable of payment.

Payee.—The person to whose order a note, bill or draft is to be paid. Payer .- One who pays.

Penalty.-Forfeiture, or sum to be forfeited for non-performance of an agreement

Per Cent -- By the hundred; rates of interest, discount, etc.

Percentage .-- An allowance reckoned by hundredth parts; commission.

Per Contra .- To the opposite side of an account.

Permit.-Written authority to remove dutiable goods. Petty Cash Book .-- Account of small

receipts and expenses

Pledge.—A pawn: personal property deposited as security. Policy .-- The written contract of in-

surance. Port. - A harbor for vessels; a com-

mercial city.

Port of Entry. - A port where a custom house is established for the entry of imports.

Post Dated .- Having a date subsequent to that at which it is actually made.

Posting .- To transfer from day book or journal to the ledger.

Post Obit .- A promise to pay loans after the death of some person.

Attorney .- Written Power of thority from one person to another to act for him.

Preferred Creditor .- One whose claims a bankrupt debtor elects to settle first

Premises .- The thing previously mentioned, lands, estate, etc.

Premium .- The percentage paid for insurance; the excess of value above par.

Price .-- Current value, or rate paid or demanded in barter.

Price Current .- A statement showing prevailing price of merchandise, stocks or securities.

Price List .-- A list of articles with prices attached.

Prima Facie.-At first view of appearance.

Principal.-An employer; the head of a firm; a capital sum placed at interest.

Proceeds .- The sum realized by a sale

Procuration .- A general letter or power of attorney; an instrument empowering one person to act for another.

Produce .-- Farm products of all

Profit and Loss .-- An account which gains and losses are balanced.

Promissory Note .-- (See Note).

Pro Rata.-A proportional distribution

Protective Tariff .-- Duty imposed on imports to encourage manufacture,

Protest .-- A formal declaration made by a notary for want of payment of. a note or bill of exchange.

Purveyor .-- One who supplies provisions.

Quarantine.—To prohibit a ship from intercourse with shore when suspected of having contagious diseases on board; the place of such prohibition.

Quasi.—As if; as though; quasi cor-porations are bodies like corporations, and yet not strictly corporations.

Rate. -- The ratio or standard.

Ratification .-- Giving force to a contract made by the person in ques-tion, but now in force, or by another man as his agent.

Real Estate.-Property in houses or lands.

Real Property.-That which is fixed or immovable: land with whatever is erected or growing upon it, with whatever is beneath or above the surface.

Rebatement.-Deduction count of prompt payment, discount.

Receipt .- An acknowledgment of

payment in writing.
Receipt Book.—A book in which receipts are filed.

Receiver.—An officer appointed by a court to hold in trust property in litigation, or to wind up the affairs of a bankrupt concern.

Reciprocity Treaty.—A commercial treaty between two nations securing mutual advantages.

Reclamation.—A claim made against the seller of goods which prove deficient or defective.

Refund .- To repay; to restore.

Register.—A ship's paper issued by the Custom House, stating description, name, to and ownership. tonnage, nationality

Registry.—The entering or recording of real estate conveyances in books of public record.

Remittance.-Transfer of funds from one party to another.

Release -An instrument in the general form of a deed which in distinct terms remits the claim to which it refers.

Remedy .- The legal means employed to enforce a right or redress an in jury.

Rent.—Compensation for the use of real property.

Repository .- A warehouse or storehouse.

Reprisal.—The seizure of ships or property to indemnify for unlawful seizure or detention.

Resources .- Available means; funds. Respondential Bond .-- A pledge of a cargo at sea.

Retail.-Selling goods in small quantities.

Retire .- To take up one's note before due; to relinquish business.

Returns .- Profit of an investment. Revenue. - Income; return; annual income of a nation for public uses.

SAFE METHODS

Revenue Cutters .- Small vessels to aid revenue officers in the collection of duties or to prevent smuggling.

Reversion. -- Right to possess property after the happening of some event, as the death of a person.

Revert.—To fall again into the pos-

session of the donor, or of the former proprietor.

S

Sale .- Transfer of property for a

consideration.

Salvage .- A compensation to those who rescue a ship or a cargo from loss.

Salvor.—One who voluntarily saves a ship or a cargo from peril. Sans Recourse.—Without recourse:

sometimes added to the indorsement of a note or bill to protect an indorser from liability. Scrip -Certificate of stock given be-

fore registration.

Secondarily.—Applied to an indorser of a note or drawer of a bill, signifying that he is only conditionally liable, or liable if the maker and drawee fail. Seaworthy .- Fit for a voyage and

properly equipped.

Sample .- A small portion of merchandise taken as a specimen of quality

Securities .- Documents securing a

right to property.

Seize.—To take possession of by virtue of a warrant or legal authority.

Seller's Option .- A term mostly confined to the sales of stocks, for a sale which gives to the seller the option of delivering the article sold within a certain time, the buyer paying interest up to delivery

Shipment:-That which is shipped;

embarkation.

Set-off.—A claim which one party has against another who has a claim against him; a counter claim.

Shipper.—One who gives merchandise to another for transportation.

Sight.—Time of presenting bill to

drawee. Short.—To "sell short" is to sell for future delivery what one does not possess, in hopes that prices will fall Shrinkage .- Reduction in bulk or

measurement.

Short Exchange.-Bills of exchange payable at sight or in a few days Sight Draft .- One payable at sight,

i. e., when presented.

Signature.—The name of a person written with his own hand, signifying his consent to the writing above it.

Silent Partner .- One who furnishes capital, but takes no active part in

a business.

Simple Interest .- Interest on principal alone; not compound.

Sinking Fund.—A fund set apart from earnings or other income, for the redemption of debts of Government, or of a corporation.

Sleeping Partner.—One who shares the profits of a business without letting his name appear, or taking

part in it actively.

Slop Shop.-A store where ready-made clothing is sold.

Smuggler .- One who avoids the payment of duties by secretly import-ing goods into a country; a vessel engaged in smuggling.

Solvency.—Ability to pay all debts or just claims.

Specialty .- A contract or obligation under seal.
Statement.—Usually a list of prop-

erty, or resources and liabilities. Speculation .- A business investment

out of the ordinary run of trade.
Stamp Duty.—Law requiring stamps to be affixed to checks and proprietary articles.

Solicitor.—An attorney or advocate; the title of a person admitted to practice in the court of chancery or equity

Staple.-Principal commodity of a

country or district.

Statistics.—A collection of facts arranged and classified.

Statute .- A positive law, established by act of legislature.

Statute Law.—Enactments by the legislature, written, as opposed to common or unwritten law.

Sterling.—Lawful or standard money

of Great Britain.

Stock .- Shares in the capital of a corporation: goods on hand.

Stock Broker .- One who buys and sells stock on commission.

Stock Exchange.-Place where shares of stock are bought and sold.

Stockholder .- One who holds shares of stock Stock Jobber .- One who speculates

in stocks.

Stipend .- Settled pay or compensation for services

Stipulation. - A contract or bargain. Stoppage in Transitu.-The seller of goods upon credit resuming possession after their shipment before they get into actual possession sion of the buyer.

BUSINESS DICTIONARY

Storage.—Sums paid for storing goods: the business of storing goods.

Stowage .- Careful arrangement of cargo in a ship

Sundries .- Unclassified articles.

Sue. To seek justice by a legal proc-

Supercargo.-An agent who accompanies a cargo to care for it and sell it.

Surcharge.—An overcharge. Surety.—One who binds himself to pay money in case another person fails to pay, to fill a contract or to serve with integrity.

Surveyor.—Agent of an insurance

company to examine and report on applications for marine or fire insurance.

Suspend.-To fail; to stop payment Sutler .- One authorized to sell goods to an army

Suttle Weight .- Weight after tare is

deducted. Suspense Account .- An account used to contain balances of personal accounts which may be considered doubtful.

Tacit .- Implied but not expressed. Tally .- Keeping account by checking off.

Tally Man.-One who receives pay-ment for goods in weekly installments.

Tare .- An allowance for the cask,

bag or covering in which goods are contained.

Tariff.-A list of duties to be imposed on goods imported or ex-

ported.
Tax.—A levy made upon property
for the support of the Government.
Teller.—Officer in a bank who receives and pays out money. Tenants.-Those who lease or rent

real estate

Tenants in Common.-Persons holding land, etc., by several and distinct titles and not by joint title.
Tenement.—That which is held.

Tender .- Offer to supply money or articles: to offer or present for acceptance

Tenure.—The manner of holding property in lands.

Testator.—The person leaving a val'd

Textile Fabrics .- All kinds of woven goods, generally restricted to piece goods.

Tickler .- A book containing memoranda of notes and debts, arranged in the order of their maturity

Time Bargain.-A contract for the future sale of stock.

Time Draft.-A draft maturing at a future specified time.

Tonnage. - The weight of goods car-

ried in a boat or ship.

Trade Discount.—An allowance made

to dealers in the same line.

Trade Mark.—Letters, figures, or devices used on goods and labels which a manufacturer has the sole right to use.

Trade Price.—That allowed by whole-

sale dealers to retailers.

Trade Sale .- An auction by and for trade; especially of booksellers.

Trades Union.—A combination of workingmen to protect their own

interests

Traffic.-Business done, especially that of a railroad.

Transshipment. - Removing goods from one ship or conveyance to another.

Transportation .- Conveying goods from one place to another

Transit Duty,-Tax imposed on goods for passing through a country.

Traveler.—A commercial agent; a

drummer.
Transact.—To perform commercial

business; to conduct matters.

Transfer.—To convey right, title or

property.

Treasury.—A place where public revenues are deposited and kept. Treasury Notes.—Notes of various denominations issued by the Gov-

ernment, and received in payment of all dues, except duties on imports.

Treaty.-An agreement or compact between two or more nations

Tret.—Allowance for waste of 4 lbs. in 104 lbs., after tare has been deducted.

Triplicate.—To make three copies of a paper; the third copy,
Trustee.—One who is intrusted with

property for the benefit of another.

Ullage .- What a cask lacks of being full

Unclaimed Goods .- Goods in Government storehouses unclaimed after three years from importation, or on which duties have not been paid, may be sold at auction.

Ultimo or Ult.—Last month.
Uncurrent.—Not current; not pass-

ing in common payment..
Undersell.—To sell below the trade price.

Underwriter .- An insurer, so called because he underwrites his name to the condition of the policy.
Unseaworthy.—Unfit for voyage in

condition or equipment.

SAFE METHODS

Unsound .- In bad condition; of doubtful solvency.

Usage of Trade -Custom, or the frequent repetition of the same act in business.

Usance.-Business custom which is generally conceded and acted upon. Usury. — Exorbitant interest, for-merly merely interest.

States Notes .- A written United promise to pay to the bearer, on demand, a certain sum of money, issued by the United States Government and used as money.

Valid .- Having legal strength or

Validity .- The quality of being good in law

Value .- Rate, of estimated worth; amount obtainable in exchange for a thing

Value Received .- Phrase used in notes or bills to express a consideration indefinitely

Valued Policy .- One which fixes the value of property insured.

Vend .- To sell

Vendee.—The person to whom a thing is sold.

Vender.—A seller. Vendue.—An auction sale.

Venture.-A mercantile speculation or investment.

Void .- Null: having no legal or binding force.

Voidable .- Having some force, capable of being adjudged void.

Voucher .- A book, receipt, entry or other document which establishes the truth of accounts.

Wages .- Hire, reward, salary.

Waiver .- The act of waiving: of not insisting on some right, claim or privilege.

Wares .- Goods, merchandise, commodities.

Warehouseman .- One who stores goods for pay.

Warrant .- A precept authorizing an officer to seize an offender and bring him to justice; also to insure against defects.

Warranty.—An undertaking the goods or title are as represented. Wastage .- Loss in handling; shrink-

age.

Waste.-Refuse material.

Waybill.—A document containing a list and description of goods sent by a common carrier by land.

Wharfage.-Fee or duty for using a whart

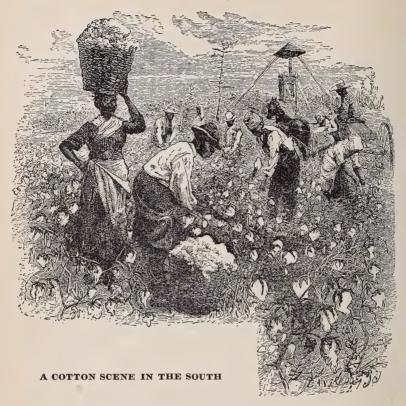
Wharfinger .- The proprietor of a wharf.

Wreckage.-Merchandise from wrech

Wreck=Master .- A person appointed by law to take charge of goods, etc., thrown ashore after a shipwreck.

Book II.

COTTON CALCULATOR



HOW TO USE THE COTTON SELLER'S TABLE.

The price per pound is given at the top of every page. In each column the black-faced figures represent the pounds and the figures opposite to them the amount in dollars and cents, at the price given at the top of the page.

EXAMPLE.—What will 501 pounds of cotton bring at 9^{15}_{16} cents.

SOLUTION.—Find the 501 in the column on the page where the price is 9^{15}_{16} cents and to the right of the 501, you will find the answer, which is \$46.66. In the "Cotton Seller's Table," the calculations are made in 16ths. Below we give a table, showing the value of any bale of cotton at $\frac{1}{32}$ of a cent.

TABLE No. 1. Estimates for 1-32.

From 300 pounds to 304 pounds 9 cents From 305 pounds to 336 pounds 10 cents	From 465 pounds to 496 pounds
From 337 pounds to 368 pounds11 cents From 369 pounds to 400 pounds12 cents	From 529 pounds to 560 pounds
From 401 pounds to 432 pounds 13 cents From 433 pounds to 464 pounds 14 cents	From 593 pounds to 624 pounds19 cents From 625 pounds to 656 pounds20 cents

COTTON SELLER'S TABLE From 300 to 60 Lbs at 60

300 \$18 0 0 350 \$21 0 0 400 \$24 0 0 450 \$27 0 0 500 \$30 0 0 550 \$33 0 0 600 \$3	
	606
302 18 12 352 21 12 402 24 12 452 27 12 502 30 12 552 33 12 602 30	612
303 18 18 353 21 18 403 24 18 453 27 18 503 30 18 553 33 18 603 30	
304 18 24 354 21 24 404 24 24 454 27 24 504 30 24 554 33 24 604 30	6 24
305 18 30 355 21 30 405 24 30 455 27 30 505 30 30 555 33 30 605 30	6 3 0
306 18 36 356 21 36 406 24 36 456 27 36 506 30 36 556 33 36 606 30	6 3 6
307 18 42 357 21 42 407 24 42 457 27 42 507 30 42 557 33 42 607 30	6 4 2
308 18 48 358 21 48 408 24 48 458 27 48 508 30 48 558 33 48 608 30	6 48
309 18 54 359 21 54 409 24 54 459 27 54 509 30 54 559 33 54 609 30	
310 18 60 360 21 60 410 24 60 460 27 60 510 30 60 560 33 60 610 30	
311 18 66 361 21 66 411 24 66 461 27 66 511 30 66 561 33 66 611 30	
312 18 72 362 21 72 412 24 72 462 27 72 512 30 72 562 33 72 612 30	
313 18 78 363 21 78 413 24 78 463 27 78 513 30 78 563 33 78 613 30	
314 18 84 364 21 84 414 24 84 464 27 84 514 30 84 564 33 84 614 30	
315 18 90 365 21 90 415 24 90 465 27 90 515 30 90 565 33 90 615 30	
	696
	7 0 2
318 19 08 368 22 08 418 25 08 468 28 08 518 31 08 568 34 08 618 33	
319 19 14 369 22 14 419 25 14 469 28 14 519 31 14 569 34 14 619 3	
	7 20
	7 2 6
322 19 32 372 22 32 422 25 32 472 28 32 522 31 32 572 34 32 622 3	
323 19 38 373 22 38 423 25 38 473 28 38 523 31 38 573 34 38 623 3	
324 19 44 374 22 44 424 25 44 474 28 44 524 31 44 574 34 44 624 3'	
325 19 50 375 22 50 425 25 50 475 28 50 525 31 50 575 34 50 625 3'	
	7 5 6
327 19 62 377 22 62 427 25 62 477 28 62 527 31 62 577 34 62 627 3	
328 19 68 378 22 68 428 25 68 478 28 68 528 31 68 578 34 68 628 37	
329 19 74 379 22 74 429 25 74 479 28 74 529 31 74 579 34 74 629 37	
330 19 80 380 22 80 430 25 80 480 28 80 530 31 80 580 34 80 630 37	
337 20 22 387 23 22 437 26 22 487 29 22 537 32 22 587 35 22 637 38	
338 20 28 388 23 28 438 26 28 488 29 28 538 32 28 588 35 28 688 38	
339 20 34 389 23 34 439 26 34 489 29 34 539 32 34 589 35 34 639 38	
340 20 40 390 23 40 440 26 40 490 29 40 540 32 40 590 35 40 640 38	
341 20 46 391 23 46 441 26 46 491 29 46 541 32 46 591 35 46 641 38	
342 20 52 392 23 52 442 26 52 492 29 52 542 32 52 592 35 52 642 38	
343 20 58 393 23 58 443 26 58 493 29 58 543 32 58 593 35 58 643 38	
344 20 64 394 23 64 444 26 64 494 29 64 544 32 64 594 35 64 644 38	
345 20 70 395 23 70 445 26 70 495 29 70 545 32 70 595 35 70 645 38	
346 20 76 396 23 76 446 26 76 496 29 76 546 32 76 596 35 76 646 38	
347 20 82 397 23 82 447 26 82 497 29 82 547 32 82 597 35 82 647 38	
348 20 88 398 23 88 448 26 88 498 29 88 548 32 88 598 35 88 648 38	
349 20 94 399 23 94 449 26 94 499 29 94 549 32 94 599 35 94 649 38	3 9 4

COTTON SELLER'S TABLE From 300 to 616C

COTTON SELLER'S TABLE From 300 to 618

COTTON SELLER'S TABLE From 300 to 63 60 16C

COTTON SELLER'S TABLE From 300 to 649 Lbs at

64C

COTTON SELLER'S TABLE From 300 to 616 C

COTTON SELLER'S TABLE From 300 to 63 C

COTTON SELLER'S TABLE From 300 to 616C

COTTON SELLER'S TABLE From 300 to 62 C

COTTON SELLER'S TABLE From 300 to 6 3 6 C

COTTON SELLER'S TABLE From 300 to 65 C



COTTON SELLER'S TABLE From 300 to 611 616 C

COTTON SELLER'S TABLE From 300 to 649 Lbs at

64C

COTTON SELLER'S TABLE From 300 to 613 C

COTTON SELLER'S TABLE From 300 to 68C

COTTON SELLER'S TABLE From 300 to 615 C

COTTON SELLER'S TABLE From 300 to 649 Lbs at

7c

COTTON SELLER'S TABLE From 300 to 7 16C

COTTON SELLER'S TABLE From 300 to 7 &C

COTTON SELLER'S TABLE From 300 to 7 3 C

COTTON SELLER'S TABLE From 300 to 74C

COTTON SELLER'S TABLE From 300 to 7 5 16C

COTTON SELLER'S TABLE From 300 to 73

COTTON SELLER'S TABLE From 300 to 7 7 16 C

COTTON SELLER'S TABLE From 300 to 7 2 C

COTTON SELLER'S TABLE From 300 to 716C

COTTON SELLER'S TABLE From 300 to 75C

COTTON SELLER'S TABLE From 300 to 7116C

COTTON SELLER'S TABLE From 300 to 73C

COTTON SELLER'S TABLE From 300 to 713 C

COTTON SELLER'S TABLE From 300 to 73C

COTTON SELLER'S TABLE From 300 to 7 15 C

COTTON SELLER'S TABLE From 300 to 649 Lbs at

8c

COTTON SELLER'S TABLE From 300 to 8 16C

COTTON SELLER'S TABLE From 300 to 81 C

COTTON SELLER'S TABLE From 300 to 8 3 C

COTTON SELLER'S TABLE From 300 to 8 1

COTTON SELLER'S TABLE From 300 to 8 5 C

COTTON SELLER'S TABLE From 300 to 88C

COTTON SELLER'S TABLE From 300 to 876

COTTON SELLER'S TABLE From 300 to 82C

COTTON SELLER'S TABLE From 300 to 8 9 C

COTTON SELLER'S TABLE From 300 to 85

COTTON SELLER'S TABLE From 300 to 811 C

COTTON SELLER'S TABLE From 300 to 83

COTTON SELLER'S TABLE From 300 to 813 C

COTTON SELLER'S TABLE From 300 to 87C

COTTON SELLER'S TABLE From 300 to 815 C

COTTON SELLER'S TABLE From 300 to 649 Lbs at

9c

COTTON SELLER'S TABLE From 300 to 916C

COTTON SELLER'S TABLE From 300 to 9 8

COTTON SELLER'S TABLE From 300 to 916C

COTTON SELLER'S TABLE From 300 to 649 Lbs at

94C

COTTON SELLER'S TABLE From 300 to 9 16C

COTTON SELLER'S TABLE From 300 to 98C

300\$28 12350\$32 81 400\$37 50 450\$42 19500\$46 87 550\$51 56 600\$56 25	•
301 28 22 351 32 91 401 37 59 451 42 28 501 46 97 551 51 66 601 56 34	
302 28 31 352 33 00 402 37 69 452 42 37 502 47 06 552 51 75 602 56 44	
303 28 41 353 33 09 403 37 78 453 42 47 503 47 16 553 51 84 603 56 53	
304 28 50 354 33 19 404 37 87 454 42 56 504 47 25 554 51 9 4 604 56 62	
305 28 59 355 33 28 405 37 97 455 42 66 505 47 34 555 52 03 605 56 72	
306 28 69 356 33 37 406 38 06 456 42 75 506 47 44 556 52 12 606 56 81	
307 28 78 357 33 47 407 38 16 457 42 84 507 47 53 557 52 22 607 56 91	
308 28 87 358 33 56 408 38 25 458 42 94 508 47 62 558 52 31 608 57 00	
309 28 97 359 33 66 409 38 34 459 43 03 509 47 72 559 52 41 609 57 09	
310 29 06 360 33 75 410 38 44 460 43 12 510 47 81 560 52 50 610 57 19	
311 29 16 361 33 84 411 38 53 461 43 22 511 47 91 561 52 59 611 57 28	
312 29 25 362 33 94 412 38 62 462 43 31 512 48 00 562 52 69 612 57 37	
313 29 34 363 34 03 413 38 72 463 43 41 513 48 09 563 52 78 613 57 47	
314 29 44 364 34 12 414 38 81 464 43 50 514 48 19 564 52 87 614 57 56	
315 29 53 365 34 22 415 38 91 465 43 59 515 48 28 565 52 97 615 57 66	
316 29 62 366 34 31 416 39 00 466 43 69 516 48 37 566 53 06 616 57 75	
317 29 72 367 34 41 417 39 09 467 43 78 517 48 47 567 53 16 617 57 84	
318 29 81 368 34 50 418 39 19 468 43 87 518 48 56 568 53 25 618 57 94	
319 29 91 369 34 59 419 39 28 469 43 97 519 48 66 569 53 34 619 58 03	
320 30 00 370 34 69 420 39 37 470 44 06 520 48 75 570 53 44 620 58 12	
321 30 09 371 34 78 421 39 47 471 44 16 521 48 84 571 53 53 621 58 22	
322 30 19 372 34 87 422 39 56 472 44 25 522 48 94 572 53 62 622 58 31	
323 30 28 373 34 97 423 39 66 473 44 34 523 49 03 573 53 72 623 58 41	
324 30 37 374 35 06 424 39 75 474 44 44 524 49 12 574 53 81 624 58 50	
325 30 47 375 35 16 425 39 84 475 44 53 525 49 22 575 53 91 625 58 59	
326 30 56 376 35 25 426 39 94 476 44 62 526 49 31 576 54 00 626 58 69	
327 30 66 377 35 34 427 40 03 477 44 72 527 49 41 577 54 09 627 58 78 328 30 75 378 35 44 428 40 12 478 44 81 528 49 50 578 54 19 628 58 87	
00 10 11 10 10 11 10 10 10 10 10 10 10 1	
30 00 01 20 00 00 00 00 00 00 00 00 00 00 00 00	
330 30 94 380 35 62 430 40 31 480 45 00 530 49 69 580 54 37 630 59 06 331 31 03 381 35 72 431 40 41 481 45 09 531 49 78 581 54 47 631 59 16	
332 31 12 382 35 81 432 40 50 482 45 19 532 49 87 582 54 56 632 59 25	
333 31 22 383 35 91 433 40 59 483 45 28 533 49 97 583 54 66 633 59 34	
334 31 31 384 36 00 434 40 69 484 45 37 534 50 06 584 54 75 634 59 44	
335 31 41 385 36 09 435 40 78 485 45 47 535 50 16 585 54 84 635 59 53	4
336 31 50 386 36 19 436 40 87 486 45 56 536 50 25 586 54 94 636 59 62	
337 31 59 387 36 28 437 40 97 487 45 66 537 50 34 587 55 03 637 59 72	
338 31 69 388 36 37 438 41 06 488 45 75 538 50 44 588 55 12 638 59 81	
339 31 78 389 36 47 439 41 16 489 45 84 539 50 53 589 55 22 639 59 91	
340 31 87 390 36 56 440 41 25 490 45 94 540 50 62 590 55 31 640 60 00	
341 31 97 391 36 66 441 41 34 491 46 03 541 50 72 591 55 41 641 60 09	
342 32 06 392 36 75 442 41 44 492 46 12 542 50 81 592 55 50 642 60 19	
$343 \ 32 \ 16 393 \ 36 \ 84 443 \ 44 \ 53 493 \ 46 \ 22 543 \ 50 \ 91 593 \ 55 \ 59 643 \ 60 \ 28$	
344 32 25 394 36 94 444 41 62 494 46 31 544 51 00 594 55 69 644 60 37	
345 32 34 395 37 03 445 41 72 495 46 41 545 51 09 595 55 78 645 60 47	
346 32 44 396 37 12 446 41 81 496 46 50 546 51 19 596 55 87 646 60 56	
347 32 53 397 37 22 447 41 91 497 46 59 547 51 28 597 55 97 647 60 66	
348 32 62 398 37 31 448 42 00 498 46 69 548 51 37 598 56 06 648 60 75	
349 32 72 399 37 41 449 42 09 499 46 78 549 51 47 599 56 16 649 60 84	

COTTON SELLER'S TABLE From 300 to 976

COTTON SELLER'S TABLE From 300 to 92C

COTTON SELLER'S TABLE From 300 to 916C

COTTON SELLER'S TABLE From 300 to 649 Lbs at

95₈C

COTTON SELLER'S TABLE From 300 to 911 C

COTTON SELLER'S TABLE From 300 to 93C

COTTON SELLER'S TABLE From 300 to 913 C

COTTON SELLER'S TABLE From 300 to 649 Lbs at

98C

COTTON SELLER'S TABLE From 300 to 915 C

COTTON SELLER'S TABLE From 300 to 10c

300\$30 00 350\$35 00 400\$40 00 450\$45 00 500\$50 00 550\$55 00 600\$60 00	5
301 30 10 351 35 10 401 40 10 451 45 10 501 50 10 551 55 10 601 60 10	
302 30 20 352 35 20 402 40 20 452 45 20 502 50 20 552 55 20 602 60 20	
303 30 30 353 35 30 403 40 30 453 45 30 503 50 30 553 55 30 603 60 30	1
304 30 40 354 35 40 404 40 40 454 45 40 504 50 40 554 55 40 604 60 40	1
305 30 50 355 35 50 405 40 50 455 45 50 505 50 50 555 55 50 605 60 50	-
306 30 60 356 35 60 406 40 60 456 45 60 506 50 60 556 55 60 606 60 60	
307 30 70 357 35 70 407 40 70 457 45 70 507 50 70 557 55 70 607 60 70	
308 30 80 358 35 80 408 40 80 458 45 80 508 50 80 558 55 80 608 60 80	
309 30 90 359 35 90 409 40 90 459 45 90 509 50 90 559 55 90 609 60 96	
310 31 00 360 36 00 410 41 00 460 46 00 510 51 00 560 56 00 610 61 00	
311 31 10 361 36 10 411 41 10 461 46 10 511 51 10 561 56 10 611 61 10	
312 31 20 362 36 20 412 41 20 462 46 20 512 51 20 562 56 20 612 61 20	
313 31 30 363 36 30 413 41 30 463 46 30 513 51 30 563 56 30 613 61 30	
314 31 40 364 36 40 414 41 40 464 46 40 514 51 40 564 56 40 614 61 40	
315 31 50 365 36 50 415 41 50 465 46 50 515 51 50 565 56 50 615 61 50	
316 31 60 366 36 60 416 41 60 466 46 60 516 51 60 566 56 60 616 61 60	
317 31 70 367 36 70 417 41 70 467 46 70 517 51 70 567 56 70 617 61 70	
318 31 80 368 36 80 418 41 80 468 46 80 518 51 80 568 56 80 618 61 80	
319 31 90 369 36 90 419 41 90 469 46 90 519 51 90 569 56 90 619 61 90	
320 32 00 370 37 00 420 42 00 470 47 00 520 52 00 570 57 00 620 62 00	
321 32 10 371 37 10 421 42 10 471 47 10 521 52 10 571 57 10 621 62 10	
322 32 20 372 37 20 422 42 20 472 47 20 522 52 20 572 57 20 622 62 20	
323 32 30 373 37 30 423 42 30 473 47 30 523 52 30 573 57 30 623 62 30	
324 32 40 374 37 40 424 42 40 474 47 40 524 52 40 574 57 40 624 62 40	
325 32 50 375 37 50 425 42 50 475 47 50 525 52 50 575 57 50 625 62 50	
326 32 60 376 37 60 426 42 60 476 47 60 526 52 60 576 57 60 626 62 60	
327 32 70 377 37 70 427 42 70 477 47 70 527 52 70 577 57 70 627 62 70	
328 32 80 378 37 80 428 42 80 478 47 80 528 52 80 578 57 80 628 62 80	
329 32 90 379 37 90 429 42 90 479 47 90 529 52 90 579 57 90 629 62 90	
330 33 00 380 38 00 430 43 00 480 48 00 530 53 00 580 58 00 630 63 00	
331 33 10 381 38 10 431 43 10 481 48 10 531 53 10 581 58 10 631 63 10	
332 33 20 382 38 20 432 43 20 482 48 20 532 53 20 582 58 20 632 63 20	
333 33 30 383 38 30 433 43 30 483 48 30 533 53 30 583 58 30 633 63 30).
334 33 40 384 38 40 434 43 40 484 48 40 534 53 40 584 58 40 634 63 40	,
335 33 50 385 38 50 435 43 50 485 48 50 535 53 50 585 58 50 635 63 50	,
336 33 60 386 38 60 436 43 60 486 48 60 536 53 60 586 58 60 636 63 60	,
337 33 70 387 38 70 437 43 70 487 48 70 537 53 70 587 58 70 637 63 70	
338 33 80 388 38 80 438 43 80 488 48 80 538 53 80 588 58 80 638 63 80	
339 33 90 389 38 90 439 43 90 489 48 90 539 53 90 589 58 90 639 63 90	,
340 34 00 390 39 00 440 44 00 490 49 00 540 54 00 590 59 00 640 64 00	
341 34 10 391 39 10 441 44 10 491 49 10 541 54 10 591 59 10 641 64 10	,
342 34 20 392 39 20 442 44 20 492 49 20 542 54 20 592 59 20 642 64 20	,
343 34 30 393 39 30 443 44 30 493 49 30 543 54 30 593 59 30 643 64 30	
344 34 40 394 39 40 444 44 40 494 49 40 544 54 40 594 59 40 644 64 40	
345 34 50 395 39 50 445 44 50 495 49 50 545 54 50 595 59 50 645 64 50	
346 34 60 396 39 60 446 44 60 496 49 60 546 54 60 596 59 60 646 64 60	
347 34 70 397 39 70 447 44 70 497 49 70 547 54 70 597 59 70 647 64 70	
348 34 80 398 39 80 448 44 80 498 49 80 548 54 80 598 59 80 648 64 80	
349 34 9 0 399 3 9 9 0 449 44 9 0 499 4 9 9 0 549 54 9 0 599 5 9 9 0 649 64 9 0	1

COTTON SELLER'S TABLE From 300 to 1016C

COTTON SELLER'S TABLE From 300 to 10 8C

COTTON SELLER'S TABLE From 300 to 1016C

COTTON SELLER'S TABLE From 300 to 104C

COTTON SELLER'S TABLE From 300 to 10 5

COTTON SELLER'S TABLE From 300 to 649 Lbs at

IU₃C

COTTON SELLER'S TABLE From 300 to 10 7 16 C

COTTON SELLER'S TABLE From 300 to 102C

COTTON SELLER'S TABLE From 300 to 10 16C

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300$31 69|350$36 97|400$42 25|450$47 53|500$52 81|550$58 0 9 600$63 37
301 31 79 351 37 07 401 42 36 451 47 64 501 52 92 551 58 20 601 63 48
302 31 90 352 37 18 402 42 46 452 47 74 502 53 02 552 58 30 602 63 59
303 32 00 353 37 29 403 42 57 453 47 85 503 53 13 553 58 41 603 63 69
304 32 11 354 37 39 404 42 67 454 47 95 504 53 23 554 58 52 604 63 80
305 32 22 355 37 50 405 42 78 455 48 06 505 53 34 555 58 62 605 63 90
306 32 32 356 37 60 406 42 88 456 48 16 506 53 45 556 58 73 606 64 01
307 32 43 357 37 71 407 42 99 457 48 27 507 53 55 557 58 83 607 64 11
308 32 53 358 37 81 408 43 09 458 48 38 508 53 66 558 58 94 608 64 22
309 32 64 359 37 92 409 43 20 459 48 48 509 53 76 559 59 04 609 64 33
310 32 74 360 38 02 410 43 31 460 48 59 510 53 87 560 59 15 610 64 43
    32 85 361 38 13 411 43 41 461 48 69 511 53 97 561 59 26 611 64 54
311
   32 95 362 38 24 412 43 52 462 48 80 512 54 08 562 59 36 612 64 64
312
313 33 06 363 38 34 413 43 62 463 48 90 513 54 19 563 59 47 613 64 75
314 33 17|364 38 45|414 43 73|464 49 01|514 54 29|564 59 57|614 64 85
315 33 27 365 38 55 415 43 83 465 49 12 515 54 40 565 59 68 615 64 96
316 33 38 366 38 66 416 43 94 466 49 22 516 54 50 566 59 78 616 65 06
317 33 48 367 38 76 417 44 05 467 49 33 517 54 61 567 59 89 617 65 17
318 33 59 368 38 87 418 44 15 468 49 43 518 54 71 568 59 99 618 65 28
319 33 69 369 38 98 419 44 26 469 49 54 519 54 82 569 60 10 619 65 38
320 33 80 370 39 08 420 44 36 470 49 64 520 54 92 570 60 21 620 65 49
321 33 91 371 39 19 421 44 47 471 49 75 521 55 03 571 60 31 621 65 59
   34 01 372 39 29 422 44 57 472 49 85 522 55 14 572 60 42 622
322
                                                                 65 70
323 34 12 373 39 40 423 44 68 473 49 96 523 55 24 573 60 52 623 65 80
324 34 22 374 39 50 424 44 78 474 50 07 524 55 35 574 60 63 624 65 91
325 34 33 375 39 61 425 44 89 475 50 17 525 55 45 575 60 73 625 66 02
326 34 43 376 39 71 426 45 0 0 476 50 28 526 55 56 576 60 84 626 66 12
327 34 54 377 39 82 427 45 10 477 50 38 527 55 66 577 60 95 627 66 23
328 34 64 378 39 93 428 45 21 478 50 49 528 55 77 578 61 05 628 66 33
329 34 75|379 40 03|429 45 31|479 50 59|529 55 88|579 61 16|629 66 44
330 34 86 380 40 14 430 45 42 480 50 70 530 55 98 580 61 26 630 66 54
331 34 96 381 40 24 431 45 52 481 50 81 531 56 09 581 61 37 631 66 65
332 35 07 382 40 35 432 45 63 482 50 91 532 56 19 582 61 47 632 66 75 333 35 17 383 40 45 433 45 74 483 51 02 533 56 30 583 61 58 633 66 86
334 35 28 384 40 56 434 45 84 484 51 12 534 56 40 584 61 68 634 66 97
335 35 38 385 40 67 435 45 95 485 51 23 535 56 51 585 61 79 635 67 07
336 35 49 386 40 77 436 46 05 486 51 33 536 56 61 586 61 90 636 67 18
337 35 60 387 40 88 437 46 16 487 51 44 537 56 72 587 62 00 637 67 28
338 35 70 388 40 98 438 46 26 488 51 54 538 56 83 588 62 11 638 67 39
339 35 81 389 41 09 439 46 37 489 51 65 539 56 93 589 62 21 639 67 49
340 35 91 390 41 19 440 46 47 490 51 76 540 57 04 590 62 32 640 67 60
341 36 02 391 41 30 441 46 58 491 51 86 541 57 14 591 62 42 641 67 71
342 3 6 1 2 392 4 1 4 0 442 4 6 6 9 492 5 1 9 7 542 5 7 2 5 5 9 2 6 2 5 3 6 4 2 6 7 8 1
343 36 23 393 41 51 443 46 79 493 52 07 543 57 35 593 62 64 643 67 92
344 36 33 394 41 62 444 46 90 494 52 18 544 57 46 594 62 74 644 68 02
345 36 44 395 41 72 445 47 00 495 52 28 545 57 57 595 62 85 645 68 13
346 36 55 396 41 83 446 47 11 496 52 39 546 57 67 596 62 95 646 68 23
347 36 65 397 41 93 447 47 21 497 52 50 547 57 78 597 63 06 647 68 34
348 36 76 398 42 04 448 47 32 498 52 60 548 57 88 598 63 16 648 68 44
349 36 86 399 42 14 449 47 43 499 52 71 549 57 99 599 63 27 649 68 55
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COTTON SELLER'S TABLE From 300 to 10 5 C

COTTON SELLER'S TABLE From 300 to 1016C

COTTON SELLER'S TABLE From 300 to 103C

COTTON SELLER'S TABLE From 390 to 1013 C

COTTON SELLER'S TABLE From 300 to 10 8C

COTTON SELLER'S TABLE From 300 to 1015C

COTTON SELLER'S TABLE From 300 to 649 Lbs at

llc

COTTON SELLER'S TABLE From 300 to 1 16C

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300$33 19|350$38 72|400$44 25|450$49 78|500$55 31|550$60 84 600$66 37
301 33 30 351 38 83 401 44 36 451 49 89 501 55 42 551 60 95 601 66 49
302 33 41 352 38 94 402 44 47 452 50 00 502 55 53 552 61 06 602 66 60
303 33 52 353 39 05 403 44 58 453 50 11 503 55 64 553 61 18 603 66 71
304 33 63 354 39 16 404 44 69 454 50 22 504 55 75 554 61 29 604 66 82 305 33 74 355 39 27 405 44 80 455 50 33 505 55 87 555 61 40 605 66 93
306 33 85 356 39 38 406 44 91 456 50 44 506 55 98 556 61 51 606 67 04
307 33 96 357 39 49 407 45 02 457 50 56 507 56 09 557 61 62 607 67 15
308 34 07 358 39 60 408 45 13 458 50 67 508 56 20 558 61 73 608 67 26
309 34 18 359 39 71 409 45 25 459 50 78 509 56 31 559 61 84 609 67 37
310 34 29 360 39 82 410 45 36 460 50 89 510 56 42 560 61 95 610 67 48
311 34 40 361 39 94 411 45 47 461 51 00 511 56 53 561 62 06 611 67 59
312 34 51 362 40 05 412 45 58 462 51 11 512 56 64 562 62 17 612 67 70
313 34 63 363 40 16 413 45 69 463 51 22 513 56 75 563 62 28 613 67 81
314 34 74 364 40 27 414 45 80 464 51 33 514 56 86 564 62 39 614 67 92
315 34 85 365 40 38 415 45 91 465 51 44 515 56 97 565 62 50 615 68 03
316 34 96 366 40 49 416 46 02 466 51 55 516 57 08 566 62 61 616 68 14
317 35 07 367 40 60 417 46 13 467 51 66 517 57 19 567 62 72 617 68 26
318 35 18 368 40 71 418 46 24 468 51 77 518 57 30 568 62 83 618 68 37
319 35 29 369 40 82 419 46 35 469 51 88 519 57 41 569 62 95 619 68 48
320 35 40 370 40 93 420 46 46 470 51 99 520 57 52 570 63 06 620 68 59
321 35 51 371 41 04 421 46 57 471 52 10 521 57 64 571 63 17 621 68 70
322 35 62 372 41 15 422 46 68 472 52 21 522 57 75 572 63 28 622
323 35 73 373 41 26 423 46 79 473 52 33 523 57 86 573 63 39 623 68 92
324 35 84 374 41 37 424 46 90 474 52 44 524 57 97 574 63 50 624 69 03
325 35 95 375 41 48 425 47 02 475 52 55 525 58 08 575 63 61 625 69 14
326 36 06 376 41 59 426 47 13 476 52 66 526 58 19 576 63 72 626 69 25
327 36 17 377 41 71 427 47 24 477 52 77 527 58 30 577 63 83 627 69 36
328 36 28 378 41 82 428 47 35 478 52 88 528 58 41 578 63 94 628 69 47
329 3 6 4 0 379 4 1 9 3 429 4 7 4 6 479 5 2 9 9 5 2 9 5 8 5 2 5 7 9 6 4 0 5 6 2 9 6 9 5 8
330 36 51 380 42 04 430 47 57 480 53 10 530 58 63 580 64 16 630 69 69
331 36 62 381 42 15 431 47 68 481 53 21 531 58 74 581 64 27 631 69 80
332 3 6 7 3 382 4 2 2 6 432 4 7 7 9 482 5 3 3 2 5 3 2 5 8 8 5 5 82 6 4 3 8 6 3 2 6 9 9 1
333 36 84 383 42 37 433 47 90 483 53 43 533 58 96 583 64 49 633
334 36 95 384 42 48 434 48 01 484 53 54 534 59 07 584 64 60 634 70 14
335 37 06 385 42 59 435 48 12 485 53 65 535 59 18 585 64 72 635 70 25
336 37 17 386 42 70 436 48 23 486 53 76 536 59 29 586 64 83 636 70 36
337 37 28 387 42 81 437 48 34 487 53 87 537 59 41 587 64 94 637
                                                                  70 47
338 37 39 388 42 92 438 48 45 488 53 98 538 59 52 588 65 05 638 70 58
339 37 50 389 43 03 439 48 56 489 54 10 539 59 63 589 65 16 639 70 69
340 37 61 390 43 14 440 48 67 490 54 21 540 59 74 590 65 27 640 70 80
341 37 72 391 43 25 441 48 79 491 54 32 541 59 85 591 65 38 641 70 91
342 37 83 392 43 36 442 48 90 492 54 43 542 59 96 592 65 49 642 71 02
343 37 94 393 43 48 443 49 01 493 54 54 54 543 60 07 593 65 60 643 71 13
344 38 05 394 43 59 444 49 12 494 54 65 544 60 18 594 65 71 644 71 24
345 38 17 395 43 70 445 49 23 495 54 76 545 60 29 595 65 82 645
346 38 28 396 43 81 446 49 34 496 54 87 546 60 40 596 65 93 646
347 38 39 397 43 92 447 49 45 497 54 98 547 60 51 597 66 04 647 71 57
348 38 50 398 44 0 3 448 49 56 498 55 0 9 548 60 62 598 66 15 648 71 68
349 38 61 399 44 14 449 49 67 499 55 20 549 60 73 599 66 26 649 71 80
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COTTON SELLER'S TABLE From 300 to 118C

8

COTTON SELLER'S TABLE From 300 to 136C

COTTON SELLER'S TABLE From 300 to | |

COTTON SELLER'S TABLE From 300 to 15 16C

COTTON SELLER'S TABLE From 300 to 30
COTTON SELLER'S TABLE From 300 to 1 7 16 C

COTTON SELLER'S TABLE From 300 to 12C

COTTON SELLER'S TABLE From 300 to 1 9 16C

COTTON SELLER'S TABLE From 300 to 115C

COTTON SELLER'S TABLE From 300 to 11116C

COTTON SELLER'S TABLE From 300 to 13 C

COTTON SELLER'S TABLE From 300 to 113 C

COTTON SELLER'S TABLE From 300 to 1 8 C

COTTON SELLER'S TABLE From 300 to 115 C

COTTON SELLER'S TABLE From 300 to 649 Lbs at

12c

COTTON SELLER'S TABLE From 300 to 2 16C

COTTON SELLER'S TABLE From 300 to 1216

COTTON SELLER'S TABLE From 300 to 236C

COTTON SELLER'S TABLE From 300 to 24c

COTTON SELLER'S TABLE From 300 to 25 C

COTTON SELLER'S TABLE From 300 to 23C

COTTON SELLER'S TABLE From 300 to 276

COTTON SELLER'S TABLE From 300 to 22 C

COTTON SELLER'S TABLE From 300 to 29 C

COTTON SELLER'S TABLE From 300 to 125C

COTTON SELLER'S TABLE From 300 to 211 C

COTTON SELLER'S TABLE From 300 to 123C

COTTON SELLER'S TABLE From 300 to 213 C

COTTON SELLER'S TABLE From 300 to 27 C

COTTON SELLER'S TABLE From 300 to 215 C

COTTON SELLER'S TABLE From 300 to 649 Lbs at

130

COTTON SELLER'S TABLE From 300 to 316C

COTTON SELLER'S TABLE From 300 to 31 C

COTTON SELLER'S TABLE From 300 to 316C

COTTON SELLER'S TABLE From 300 649 Lbs at

343 45 45 393 52 07 443 58 70 493 65 32 543 71 95 593 78 57 643 85 20 344 45 58 394 52 20 444 58 83 494 65 45 544 72 08 594 78 70 644 85 33 345 45 71 395 52 34 445 58 96 495 65 59 545 72 21 595 78 84 645 85 46 346 45 84 396 52 47 446 59 09 496 65 72 546 72 34 596 78 97 646 85 59 347 45 98 397 52 60 447 59 23 497 65 85 547 72 48 597 79 10 647 85 73 348 46 11 398 52 73 448 59 36 498 65 98 548 72 61 598 79 2 3648 85 86 349 46 24 399 52 87 449 59 4 9499 66 12 549 72 74 599 79 37 649 85 99

COTTON SELLER'S TABLE From 300 to 3 16C

COTTON SELLER'S TABLE From 300 to 33 C

COTTON SELLER'S TABLE From 300 to 316C

```
300$40 31|350$47 03|400$53 75|450$60 47|500$67 19|550$73 91 600$80 62
301 40 45 351 47 17 401 53 88 451 60 60 501 67 32 551 74 04 601 80 76
302 40 58 352 47 30 402 54 02 452 60 74 502 67 46 552 74 17 602 80 89
303 40 72 353 47 43 403 54 15 453 60 87 503 67 59 553 74 31 603 81 03
304 40 85 354 47 57 404 54 29 454 61 01 504 67 72 554 74 44 604 81 16
305 40 98 355 47 70 405 54 42 455 61 14 505 67 86 555 74 58 605 81 30
306 41 12 356 47 84 406 54 56 456 61 27 506 67 99 556 74 71 606 81 43
307 41 25 357 47 97 407 54 69 457 61 41 507 68 13 557 74 85 607 81 57
308 41 39 358 48 11 408 54 82 458 61 54 508 68 26 558 74 98 608 81 70
309 41 52 359 48 24 409 54 96 459 61 68 509 68 40 559 75 12 609 81 84
310 41 66 360 48 37 410 55 09 460 61 81 510 68 53 560 75 25 610 81 97
311 41 79 361 48 51 411 55 23 461 61 95 511 68 67 561 75 39 611 82 10
312 41 92 362 48 64 412 55 36 462 62 08 512 68 80 562 75 52 612 82 24
313 42 06 363 48 78 413 55 50 463 62 22 513 68 94 563 75 65 613 82 37
314 42 19 364 48 91 414 55 63 464 62 35 514 69 07 564 75 79 614 82 51
315 42 33 365 49 05 415 55 77 465 62 49 515 69 20 565 75 92 615 82 64
316 42 46 366 49 18 416 55 90 466 62 62 516 69 34 566 76 06 616 82 77
317 42 60 367 49 32417 56 03467 62 75517 69 47567 76 19617 82 91 318 42 73 368 49 45 418 56 17 468 62 89518 69 61 568 76 32618 83 04
319 42 87 369 49 58 419 56 30 469 63 02 519 69 74 569 76 46 619 83 18
320 43 00|370 49 72|420 56 44|470 63 16|520 69 87|570 76 59|620 83 31
321 43 13 371 49 85 421 56 57 471 63 29 521 70 01 571 76 73 621 83 45
322 43 27 372 49 99 422 56 71 472 63 42 522 70 14 572 76 86 622 83 58
323 43 40 373 50 12 423 56 84 473 63 56 523 60 28 573 77 00 623 83 72
324 43 54 374 50 26 424 56 97 474 63 69 524 70 41 574 77 13 624 83 85
325 43 67 375 50 39 425 57 11 475 63 83 525 70 55 575 77 27 625 83 98
326 43 81 376 50 52 426 57 24 476 63 96 526 70 68 576 77 40 626 84 11
327 43 94 377 50 66 427 57 38 477 64 10 527 70 82 577 77 53 627 84 25
328 44 07 378 50 79 428 57 51 478 64 23 528 70 95 578 77 67 628 84 39
329 44 21 379 50 93 429 57 65 479 64 37 529 71 08 579 77 80 629 84 52
330 44 34 380 51 06 430 57 78 480 64 50 530 71 22 580 77 94 630 84 66
331 44 48 381 51 20 431 57 92 481 64 63 531 71 35 581 78 07 631 84 79
332 44 61 382 51 33 432 58 05 482 64 77 532 71 49 582 78 21 632 84 9 2
333 44 75 383 51 47 433 58 18 483 64 90 533 71 62 583 78 34 633 85 06
334 44 88 384 51 60 434 58 32 484 65 04 534 71 76 584 78 47 634 85 19
335 45 02 385 51 73 435 58 45 485 65 17 535 71 89 585 78 61 635 85 33
336 45 15 386 51 87 436 58 59 486 65 31 536 72 02 586 78 74 636 85 46
337 45 28 387 52 00 437 58 72 487 65 44 537 72 16 587 78 88 637 85 60
338 45 42 388 52 14 438 58 86 488 65 57 538 72 29 588 79 01 638 85 73
339 45 55 389 52 27 439 58 99 489 65 71 539 72 43 589 79 15 639 85 86
340 45 69 390 52 41 440 59 12 490 65 84 540 72 56 590 79 28 640 86 00
341 45 82 391 52 54 441 59 26 491 65 98 541 72 70 591 79 41 641 86 13
342 45 96 392 52 67 442 59 39 492 66 11 542 72 83 592 79 55 642 86 27
343 46 09 393 52 81 443 59 53 493 66 25 543 72 96 593 79 68 643 86 40
344 46 22 394 52 94 44 59 66 494 66 38 544 73 10 594 79 82 644 86 54
345 46 36 395 53 08 445 59 80 495 66 51 545 73 23 595 79 95 645 86 67
346 46 49 396 53 21 446 59 93 496 66 65 546 73 37 596 80 09 646 86 81
347 46 63 397 53 35 447 60 06 497 66 78 547 73 50 597 80 22 647 86 94
348 46 76 398 53 48 448 60 20 498 66 92 548 73 64 598 80 36 648 87 07
349 46 90 399 53 62 449 60 33 499 67 05 549 73 77 599 80 49 649 87 21
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COTTON SELLER'S TABLE From 300 to 32 C

COTTON SELLER'S TABLE From 300 to 3016C

```
300$40 69|350$47 47|400$54 25|450$61 03|500$67 81|550$74 59 600$81 37
301 40 82 351 47 60 401 54 39 451 61 17 501 67 95 551 74 73 601 81 51
301 40 96 352 47 74 402 54 52 452 61 30 502 68 0 8 552 74 8 6 602 81 65 303 41 0 9 353 47 8 8 403 54 6 6 453 61 44 503 68 22 553 75 0 0 603 81 78
304 41 23 354 48 01 404 54 79 454 61 57 504 68 35 554 75 14 604 81 92
305 41 37 355 48 15 405 54 93 455 61 71 505 68 49 555 75 27 605 82 05
306 41 50 356 48 28 406 55 06 456 61 84 506 68 63 556 75 41 606 82 19
307 41 64 357 48 42 407 55 20 457 61 98 507 68 76 557 75 54 607 82 32
308 41 77 358 48 55 408 55 33 458 62 12 508 68 90 558 75 68 608 82 46
309 41 91 359 48 69 409 55 47 459 62 25 509 69 03 559 75 81 609 82 60
310 42 04 360 48 82 410 55 61 460 62 39 510 69 17 560 75 9 5610 82 73
311 42 18 361 48 96 411 55 74 461 62 52 511 69 30 561 76 08 611 82 87
312 42 31 362 49 10 412 55 88 462 62 66 512 69 44 562 76 22 612 83 00
313 42 45 363 49 23 413 56 01 463 62 79 513 69 58 563 76 36 613 83 14
314 42 59364 49 37414 56 15464 62 93514 69 71564 76 49614 83 27 315 42 72 365 49 50 415 56 28 465 63 07515 69 85 565 76 63 615 83 41
316 42 86 366 49 64 416 56 42 466 63 20 516 69 98 566 76 76 616 83 54
317 42 99 367 49 77 417 56 56 467 63 34 517 70 12 567 76 90 617 83 68
318 43 13 368 49 91 418 56 69 468 63 47 518 70 25 568 77 03 618 83 81
319 43 26 369 50 05 419 56 83 469 63 61 519 70 39 569 77 17 619 83 95
320 43 40 370 50 18 420 56 96 470 63 74 520 70 52 570 77 30 620 84 09
321 43 54 371 50 32 421 57 10 471 63 88 521 70 66 571 77 44 621 84 22
322 43 67 372 50 45 422 57 23 472 64 01 522 70 80 572 77 58 622 84 3 6
323 43 81 373 50 59 423 57 37 473 64 15 523 70 93 573 77 71 623 84 49
324 43 94 374 50 72 424 57 50 474 64 29 524 71 07 574 77 85 624 84 63
325 44 08 375 50 86 425 57 64 475 64 42 525 71 20 575 77 98 625 84 76
326 44 21 376 50 99 426 57 78 476 64 56 526 71 34 576 78 12 626 84 90
327 44 35 377 51 13 427 57 91 477 64 69 527 71 47 577 78 25 627 85 04
328 44 48 378 51 27 428 58 05 478 64 83 528 71 61 578 78 39 628 85 17
329 44 62 379 51 40 429 58 18 479 64 96 529 71 74 579 78 53 629 85 31
330 44 76 380 51 54 430 58 32 480 65 10 530 71 88 580 78 66 630 85 44
331 44 89 381 51 67 431 58 45 481 65 23 531 72 02 581 78 80 631 85 58
332 45 03 382 51 81 432 58 59 482 65 37 532 72 15 582 78 93 632 85 71
333 4 5 1 6 383 5 1 9 4 4 3 3 5 8 7 2 4 8 3 6 5 5 1 5 3 3 7 2 2 9 5 8 3 7 9 0 7 6 3 3 8 5 8 5
334 45 30 384 52 08 434 58 86 484 65 64 534 72 42 584 79 20 634 85 99
335 45 43 385 52 21 435 59 00 485 65 78 535 72 56 585 79 34 635 86 12
336 45 57 386 52 35 436 59 13 486 65 91 536 72 69 586 79 48 636 86 26
                          59 27 487 66 05 537 72 83 587 79 61 637 86 39
337 45 70 387 52 49 437
338 45 84 388 52 62 438 59 40 488 66 18 538 72 97 588 79 75 638 86 53
339 45 98 389 52 76 439 59 54 489 66 32 539 73 10 589 79 88 639 86 66
340 46 11 390 52 89 440 59 67 490 66 46 540 73 24 590 80 02 640 86 80
341 46 25 391 53 03 441 59 81 491 66 59 541 73 37 591 80 15 641 86 93
342 46 38 392 53 16 442 59 95 492 66 73 542 73 51 592 80 29 642 87 07
343 46 52 393 53 30 443 60 08 493 66 86 543 73 64 593 80 42 643 87 21
344 46 65|394 53 44|44 60 22|494 67 00|544 73 78|594 80 56|644 87 34
345 46 79 395 53 57 445 60 35 495 67 13 545 73 91 595 80 70 645 87 48
346 46 93 396 53 71 446 60 49 496 67 27 546 74 05 596 80 83 646 87 61
347 47 0 6 397 53 8 4 447 60 6 2 497 6 7.4 0 547 74 1 9 597 8 0 9 6 647 8 7 7 5 348 4 7 2 0 398 5 3 9 8 448 60 7 6 498 6 7 5 4 548 7 4 3 2 598 8 1 1 0 648 8 7 8 8
349 47 33 399 54 11 449 60 89 499 67 68 549 74 46 599 81 24 649 88 02
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COTTON SELLER'S TABLE From 300 to 35 C

COTTON SELLER'S TABLE From 300 to 3116C

```
300841 06350847 91400854 75450861 59500868 44550875 28600882 12
301 41 20 351 48 0 4 401 5 4 8 9 451 61 7 3 501 68 5 7 551 7 5 4 2 601 8 2 2 6
302 41 34 352 48 18 402 55 02 452 61 87 502 68 71 552 75 55 602 82 40
303 41 47 353 48 32 403 55 16 453 62 00 503 68 85 553 75 69 603 82 53
304 41 61 354 48 45 404 55 30 454 62 14 504 68 98 554 75 83 604 82 67
305 41 75 355 48 59 405 55 43 455 62 28 505 69 12 555 75 96 605 82 81 306 41 88 356 48 73 406 55 57 56 62 41 506 69 26 556 76 10 606 82 94
307 42 02 357 48 86 407 55 71 457 62 55 507 69 39 557 76 24 607 83 08
308 42 16 358 49 00 408 55 84 458 62 69 508 69 53 558 76 38 608 83 22
309 42 29359 49 14409 55 98459 62 82 509 69 67 559 76 51 609 83 36
310 42 43 360 49 27 410 56 12 460 62 96 510 69 81 560 76 65 610
311 42 57 361 49 41 411 56 26 461 63 10 511 69 94 561 76 79 611 83 63
312 42 70 362 49 55 412 56 39 462 63 24 512 70 08 562 76 92 612
313 42 84 363 49 69 413 56 53 463 63 37 513 70 22 563 77 06 613 83 90
314 42 98 364 49 82 414 56 67 464 63 51 514 70 35 564 77 20 614 84 04
315 43 12 365 49 96 415 56 80 465 63 65 515 70 49 565 77 33 615 84 18
316 43 25 366 50 10 416 56 94 466 63 78 516 70 63 566 77 47 616 84 31
317 43 39 367 50 23 417 57 08 467 63 92 517 70 76 567 77 61 617 84 45
318 43 53 368 50 37 418 57 21 468 64 06 518 70 90 568 77 74 618 84 59
319 43 66 369 50 51 419 57 35 469 64 19 519 71 04 569 77 88 619 84 73
320 43 80 370 50 64 420 57 49 470 64 33 520 71 17 570 78 02 620 84 86
321 43 94 371 50 78 421 57 62 471 64 47 521 71 31 571 78 16 621 85 00
322 44 07 372 50 92 422 57 76 472 64 61 522 71 45 572 78 29 622
                                                                    85 14
323 44 21 373 51 05 423 57 90 473 64 74 523 71 59 573 78 43 623
                                                                    85 28
324 44 35 374 51 19 424 58 04 474 64 88 524 71 72 574 78 57 624 85 41
325 44 48 375 51 33 425 58 17 475 65 02 525 71 86 575 78 71 625 85 55
326 44 62 376 51 47 426 58 31 476 65 15 526 72 00 576 78 84 626 85 69
327 44 76 377 51 60 427 58 45 477 65 29 527 72 14 577 78 98 627 85 82
330 45 17 380 52 01 430 58 86 480 65 70 530 72 54 580 79 39 630 86 23
331 45 31 381 52 15 431 59 00 481 65 84 531 72 68 581 79 52 631 86 37
332 45 46 382 52 29 432 59 13 482 65 98 532 72 82 582 79 66 632 86 50
333 45 58 383 52 43 433 59 27 483 66 11 533 72 96 583 79 80 633 86 64
334 45 72 384 52 56 434 59 41 484 66 25 534 73 09 584 79 94 634 86 78
335 45 86 385 52 70 435 59 54 485 66 39 535 73 23 585 80 07 635 86 92
336 45 99 386 52 84 436 59 68 486 66 52 536 73 37 586 80 21 636 87 05
337 46 13 387 52 97 437 59 82 487 66 66 537 73 50 587 80 35 637 87 19
338 46 27 388 53 11 438 59 95 488 66 80 538 73 64 588 80 48 638 87 33
339 46 40 389 53 25 449 60 09 489 66 93 539 73 78 589 80 62 639 87 46 340 46 5 4390 53 38 440 60 23 490 67 07 540 73 91 590 80 76 640 87 60 341 46 68 391 53 52 441 60 36 491 67 21 541 74 05 591 80 89 641 87 74
342 46 81 392 53 66 442 60 50 492 67 34 542 74 19 592 81 03 642
343 46 95 393 53 79 443 60 64 493 67 48 543 74 32 593 81 17 643
344 47 09 394 53 93 444 60 77 994 67 62 544 74 46 594 81 30 644 345 47 22 395 54 07 445 60 91 495 67 75 545 74 60 595 81 44 645
346 47 36 396 54 20 446 61 05 496 67 89 546 74 73 596 81 58 646 88 42
347 47 50 397 54 34 447 61 18 497 68 03 547 74 87 597 81 71 647 88 56
348 47 63 398 54 48 448 61 32 498 68 16 548 75 01 598 81 85 648 88 69
349 47 77 1399 54 61 1449 61 46 1499 68 30 1549 75 14 1599 81 99 649 88 83
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COTTON SELLER'S TABLE From 300 to 133C

COTTON SELLER'S TABLE From 300 to 313 C

COTTON SELLER'S TABLE From 300 to 137C

COTTON SELLER'S TABLE From 300 to 315 C

COTTON PICKERS' TABLE The first column gives the top of each column the price per 100 pounds.

Pounds	25 Cents	30 Cents	35 Cents	40 Cents	45 Cents	Pounds	25 Cents	30 Cents	35 cents	40 Cents	45 cents
05 10 15 22 30 33 40 40 50 60 60 60 60 60 60 60 60 60 60 60 60 60	$\begin{array}{c} 01\\ 03\\ 04\\ 05\\ 06\\ 07\\ 09\\ 11\\ 13\\ 14\\ 15\\ 16\\ 17\\ 19\\ 20\\ 22\\ 24\\ 25\\ 22\\ 24\\ 33\\ 33\\ 33\\ 33\\ 43\\ 35\\ 36\\ 37\\ 39\\ 40\\ 44\\ 45\\ 44\\ 45\\ 44\\ 45\\ 64\\ 67\\ 49\\ 50\\ \end{array}$	02 03 05 06 07 09 11 12 13 15 16 18 19 21 22 24 25 27 30 31 33 33 36 37 40 42 44 45 55 44 55 55 56 60 60 60 60 60 60 60 60 60 60 60 60 60	0 2 0 4 0 6 0 7 0 9 1 0 1 2 1 4 1 6 1 8 2 0 0 2 1 3 2 5 5 2 6 6 2 8 3 0 3 2 2 3 4 4 4 6 6 4 8 8 5 10 5 5 5 5 5 6 6 6 2 6 3 6 6 5 6 6 7 0 6 8 8 7 0	02 04 06 08 10 12 14 16 18 20 22 24 24 26 28 30 32 34 34 46 48 50 52 54 46 66 66 67 67 77 77 78 88 80	0 2 0 5 0 7 1 0 1 2 1 4 1 6 1 8 2 0 2 3 2 5 5 7 3 9 4 1 4 4 5 5 5 5 7 5 9 1 6 1 3 6 6 8 8 4 6 8 8 8 8 9 0	2 0 5 0 5 2 1 0 5 2 1 0 5 2 1 0 5 2 1 0 5 2 1 0 5 2 2 2 5 0 5 2 2 5 5 0 5 2 2 5 5 0 5 2 2 6 5 0 5 2 2 7 7 5 0 2 8 5 0 5 0 5 2 2 9 5 0 5 3 3 1 1 5 0 3 3 3 5 0 5 3 3 6 5 0 5 3 3 3 5 0 3 3 3 5 0 3 3 3 5 0 3 3 3 5 0 3 3 3 5 0 5 3 3 6 5 0 5 3 3 7 5 0 3 3 8 5 0 5 3 3 6 5 0 5 3 3 7 5 0 3 3 8 5 0 5 3 3 6 5 0 5 3 3 6 5 0 5 3 3 6 5 0 5 3 3 6 5 0 5 3 3 6 5 0 5 3 3 6 5 0 5 3 3 6 5 0 5 3 3 6 5 0 5 3 3 6 5 0 5 3 3 6 5 0 5 3 3 6 5 0 5 3 6 5 0 5 3 6 5 0 5 3 7 5 0 5 3 6 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5	51 53 54 55 56 57 56 66 67 69 77 72 77 77 88 81 82 88 88 99 99 99 99 99 99 99 99 99 99 99	62 63 65 66 67 69 71 72 73 75 76 82 84 85 87 88 99 100 102 104 113 114 115 118 120	72 74 76 77 79 80 82 84 86 88 90 91 102 104 1107 1109 1107 114 116 118 120 1123 1125 1130 1132 1137 1138 1140	824 848 888 90 922 946 988 1000 1024 1106 11124 1116 1122 1124 1126 1128 1130 1132 1134 1142 1144 1146 1155 1155 1156 1158 1160	176

COTTON PICKERS' TABLE The first column gives the number of pounds and the top of each column the price per 100 pounds.

Pounds	25 Cents	30 Cents	35 Cents	40 Cents	45 Cents	Pounds	25 Cents	30 Cents	35 Cents	40 Cents	45 Cents
4 1 5 4 1 5 4 1 5 4 2 5 4 2 5 4 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 6 7 7 8 7 7 8 7 7 8 7 7 8 7 7 9 7 7	1 01 1 03 1 04 1 05 1 07 1 09 1 10 1 11 1 13 1 14 1 15 1 16 1 21 1 22 1 24 1 25 1 30 1 31 1 32 1 33 1 34 1 35 1 36 1 37 1 39 1 39 1 39 1 39 1 39 1 39 1 39 1 40 1 40 1 40 1 40 1 40 1 40 1 40 1 40	$\begin{vmatrix} 1 & 77 \\ 1 & 78 \end{vmatrix}$	1 42 1 44 1 46 1 1 49 1 1 50 1 1 52 1 1 56 1 1 63 1 1 72 1 1 77 1 79 1 1 82 1 1 84 1 1 93 1 1 93 1 1 93 1 1 93 2 02 2 02 2 03 2 07 2 08 2 08 2 08 2 08 2 08 2 08 2 08 2 08	1 64 1 66 1 68 1 70 1 72 1 74 1 76 1 82 1 84 1 86 1 92 1 94 1 96 1 92 2 02 2 04 2 00 2 02 2 14 2 16 2 2 2 2 2 2 2 2 3 2 3 2 3 2 3 8	1 8 2 1 1 8 5 7 1 1 9 9 2 1 1 9 9 6 1 1 9 9 6 1 2 0 0 3 2 2 0 5 7 2 2 1 1 2 2 2 2 5 7 2 2 2 2 3 5 2 2 2 3 5 7 2 2 3 4 1 3 2 2 4 5 6 6 6 2 2 6 6 6 6 2 6 6 6 6 2 6 6 6 6	6 0 5 6 1 0 6 1 5 6 2 5 6 3 0 6 3 5 6 4 0 6 5 5 6 6 0 6 6 7 5 6 8 0 6 7 5 6 8 0 7 0 0 7 1 0 7 2 0 7 2 5 7 3 0 7 7 5 0 7 7 5 0 7 7 5 0 7 7 8 0 7 8 0 7 8 0 7 8 0 7 9 5 8 0 8 0 8 0 8 0 8 0 8 0 8 0 8 0 8 0 8 0	1 51 1 52 1 54 1 55 1 57 1 59 1 60 1 63 1 64 1 65 1 66 1 70 1 71 1 72 1 75 1 76 1 77 1 77 1 78 1 80 1 81 1 82 1 85 1 87 1 99 1 99 1 99 1 99 1 99 1 99 1 99 1 9	1 82 1 83 1 85 1 87 1 89 1 91 1 92 1 95 1 96 1 98 1 95 2 04 2 05 2 04 2 05 2 10 2 11 2 13 2 16 2 17 2 19 2 20 2 24 2 25 2 27 2 28 2 31 2 33 2 34 2 35 2 38 2 40 2	2 70 2 72 2 73 2 75 2 77 2 78	2 42 2 44 2 44 2 46 2 52 2 52 2 54 2 56 2 62 2 64 2 68 2 70 2 72 2 74 2 78 2 80 2 82 2 84 2 90 2 92 2 94 3 00 3 10 3 11 3 18 3 18 3 18	2 72 2 75 2 77 2 80 2 82 2 84 2 86 2 93 2 95 2 97 3 00 2 3 05 3 07 3 09 3 11 3 15 3 17 3 20 2 3 25 3 27 3 29 3 29 3 3 3 3 3 3 3 3 3 3 3 40 3 42 3 56 3 58 3 60

Pounds	25 cents	30 Cents	35 Cents	40 Cents	45 Cents	Pounds	25 cents	30 Cents	35 Cents	40 Cents	45 Cents
9 1 1 2 2 2 9 3 3 9 4 4 9 5 5 6 6 7 7 7 9 8 8 9 9 9 9 9 9 9 9	$ \begin{array}{c} 2 \ 03 \\ 2 \ 04 \\ 2 \ 05 \\ 2 \ 06 \\ 2 \ 20 \\ 3 \ 20 \\ 4 \ 20 \\ 5 \ 20 \\ 20 \\ 20 \\ 20 \\ 20 \\ 20 \\ 20 \\ 20$	2 42 2 43 2 45 2 46 2 47 2 49 2 55 2 55 2 55 2 56 2 2 64 2 65 2 77 2 77 2 77 2 77 2 77 2 77 2 77 2 82 2 82	2 8 2 2 8 4 4 2 8 6 7 2 8 9 0 2 9 9 2 2 9 9 6 2 9 9 8 3 0 0 1 3 3 3 5 6 3 3 8 4 0 0 3 4 2 4 2 3 4 4 5 3 5 0 6 3 5 6 3 5 6 3 6 3 6 6 3 6 6 6 6 6 6 6	3 22 4 3 2 6 3 2 2 6 3 2 2 6 3 3 2 2 6 3 3 2 2 6 3 3 2 2 6 3 3 2 2 6 3 3 2 2 6 3 3 2 2 6 3 3 2 2 6 3 3 2 2 6 3 3 2 2 6 3 3 2 2 6 3 3 3 2 4 2 4 2 3 3 4 4 2 3 3 5 5 2 2 3 3 5 6 6 6 8 3 3 7 7 2 4 3 3 8 2 4 3 3 8 2 6 3 3 9 2 4 3 3 8 2 4 3 3 9 3 9 4 4 3 3 4 4 4 4 4 4 4 4 4 4	3 6 2 3 6 5 7 3 3 7 2 4 3 5 7 8 3 3 8 3 5 7 8 3 8 8 5 7 3 3 9 2 3 3 9 5 7 3 4 0 5 7 4 4 1 2 1 5 4 4 1 5 7 4 4 2 4 4 5 0 4 4 4 4 4 6 4 4 4 8 4 5 0	1005 1010 1012 1025 1030 1035 1040 1055 1066 1076 1085 1076 1085 1095 11095 11100 1125 1130 1145 1150 1150 1150 1175 1180 1185 1190 1195	2 53 2 554 2 556 2 557 2 560 2 663 2 664 2 665 2 670 2 771 2 774 2 775 2 778 2 801 2 288 2 887 2 991 2 997 2 999 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 013 3 056 3 07 3 09 3 10 2 3 14 4 3 16 3 17 3 2 2 4 4 3 3 2 2 5 7 3 2 3 3 3 5 5 6 3 3 5 5 7 8 9 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7	3 5 2 4 6 3 5 5 7 9 3 6 6 0 3 3 6 6 2 4 3 6 6 8 3 7 7 1 3 3 7 7 5 6 8 0 2 3 8 8 4 5 7 9 3 8 9 2 4 8 1 3 9 9 8 8 4 0 0 0 1 3 4 0 1 0 6 6 4 1 1 2 3 4 1 1 7 4 4 1 1 8 0 4 1 1 2 0 4 1 1 5 7 4 4 1 1 8 0 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	4 0 2 4 0 6 8 4 1 0 6 8 4 1 1 2 4 1 1 2 1 4 6 4 1 2 2 2 4 4 2 6 8 4 2 2 2 4 4 2 4 6 4 2 4 4 4 6 8 4 2 2 3 6 4 4 4 4 6 6 6 8 4 4 2 4 4 4 6 6 6 8 4 4 7 7 2 4 4 4 7 6 8 4 4 7 8 8 4 6 6 7 8 8 6 7 8 7 8 7 8 7 8 7 8 7 8 8 7 8 8 8 8	4 5 5 5 7 0 2 4 6 6 8 0 3 3 4 4 6 6 8 0 4 4 7 7 5 7 7 0 2 4 4 8 8 7 9 1 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5

				,							
Pounds	25 Cents	30 Cents	35 Cents	40 Cents	45 Cents	Pounds	25 Cents	30 Cents	35 Cents	40 Cents	45 Cents
1205 1210 1210 1210 1220 1220 1230 1235 1245 1256 1265 1275 1285 1285 1295 1295 1305 1315 1315 1320 1330 1330 1330 1330 1336 1336 1336 133	3 01 3 02 3 04 3 05 3 06 3 07 3 09 3 10 3 13 3 14 3 15 3 20 3 21 3 22 3 24 3 25 3 30 3 31 3 31 3 32 3 32 3 33 3 34 3 35 3 36 3 37 3 36 3 37 3 37 3 37 3 37 3 37	3 64 3 64 3 64 3 64 3 64 3 74 3 74 3 74 3 74 3 74 3 84 3 82 3 88 4 3 85 3 89 3 99 4 02 4 05 4 11 4 13 4 14 5 4 17 4 18 4 17 4 18 4 17	2 2 2 4 4 5 2 5 6 7 2 9 9 3 3 2 4 4 5 5 2 5 6 6 2 5 9 1 3 3 4 6 6 8 4 4 5 5 5 7 4 5 6 6 2 4 6 6 6 8 4 7 7 1 3 5 4 7 7 8 0 4 8 8 2 3 4 8 8 7 8 4 8 8 7 8 8 9 0 1 4 7 7 8 8 8 8 7 8 8 9 0 1 4 7 7 8 8 8 8 7 8 8 9 0 1 4 7 7 8 8 8 8 7 8 8 9 0 1 4 7 7 8 8 8 8 7 8 8 8 9 0 1 4 8 8 8 7 8 8 9 0 1 4 8 8 8 7 8 8 9 0 1 4 8 8 8 7 8 8 9 0 1 4 8 8 8 7 8 8 9 0 1 4 8 8 8 7 8 8 9 0 1 4 8 8 8 7 8 8 9 0 1 4 8 8 8 7 8 8 9 0 1 4 8 8 8 7 8 8 9 0 1 4 8 8 8 7 8 8 9 0 1 4 8 8 8 7 8 8 9 0 1 4 8 8 8 7 8 9 0 1 4 8 8 8 9 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 8 4 8 4 8 4 8 4 9 4 9 4 9 4 9 4 9 8 0 0 0 1 0 0 0 1 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 <td>$\begin{array}{c} 5 & 425 \\ 5 & 5 & 45 \\ 6 & 6 & 6 \\ 6 & 6 & 6 \\ 6 & 6 & 6 \\ 6 & 6 &$</td> <td>1405 1415 1420 1420 1433 1443 1445 1445 1445 1445 1445 1445</td> <td>3 53 3 53 3 53 3 55 3 55 3 55 3 55 3 55</td> <td>4 2 4 2 3 2 4 2 3 2 4 2 4 2 4 2 4 3 3 3 4 4 4<td>4 9 4 9 6 7 9</td><td>5 62 5 64 5 66 5 72 5 72 5 78 5 78 5 78 5 88 5 99 6 02 6 04 6 10 6 12 6 20 6 36 6 38 6 38</td><td>6 3 5 7 0 6 4 0 2 4 4 6 6 4 4 6 6 4 4 6 6 4 5 6 6 5 5 7 0 6 6 6 5 7 7 5 6 6 6 6 7 7 3 5 6 6 8 8 7 7 0 7 0 9 2 7 7 1 1 6 8 0 2 7 7 1 1 8 0 7 1 1 8</td></td>	$\begin{array}{c} 5 & 425 \\ 5 & 5 & 45 \\ 6 & 6 & 6 \\ 6 & 6 & 6 \\ 6 & 6 & 6 \\ 6 & 6 &$	1405 1415 1420 1420 1433 1443 1445 1445 1445 1445 1445 1445	3 53 3 53 3 53 3 55 3 55 3 55 3 55 3 55	4 2 4 2 3 2 4 2 3 2 4 2 4 2 4 2 4 3 3 3 4 4 4 <td>4 9 4 9 6 7 9</td> <td>5 62 5 64 5 66 5 72 5 72 5 78 5 78 5 78 5 88 5 99 6 02 6 04 6 10 6 12 6 20 6 36 6 38 6 38</td> <td>6 3 5 7 0 6 4 0 2 4 4 6 6 4 4 6 6 4 4 6 6 4 5 6 6 5 5 7 0 6 6 6 5 7 7 5 6 6 6 6 7 7 3 5 6 6 8 8 7 7 0 7 0 9 2 7 7 1 1 6 8 0 2 7 7 1 1 8 0 7 1 1 8</td>	4 9 4 9 6 7 9	5 62 5 64 5 66 5 72 5 72 5 78 5 78 5 78 5 88 5 99 6 02 6 04 6 10 6 12 6 20 6 36 6 38 6 38	6 3 5 7 0 6 4 0 2 4 4 6 6 4 4 6 6 4 4 6 6 4 5 6 6 5 5 7 0 6 6 6 5 7 7 5 6 6 6 6 7 7 3 5 6 6 8 8 7 7 0 7 0 9 2 7 7 1 1 6 8 0 2 7 7 1 1 8 0 7 1 1 8

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Pounds	50 cents	55 Cents	60 Cents	65 Cents	70 Cents	75 Cents	Pounds	50 Cents	55 Cents	60 Cents	65 Cents	70 Cents 75 Cents	
5 15 15 22 33 35 45 55 66 57 75 85 95 10 11 12 12 15 15 16 16 16 17 17 18 18 19 19 10 11 11 11 11 11 11 11 11 11 11 11 11	035 005 0103 1158 2235 2258 2303 335 2258 2303 335 340 443 555 667 7758 803 885 995 980 100 100 100 100 100 100 100 100 100 1	$\begin{array}{c} 03\\ 06\\ 08\\ 11\\ 14\\ 17\\ 122\\ 258\\ 336\\ 99\\ 4147\\ 52558\\ 636\\ 6922\\ 774\\ 778835881\\ 996\\ 992107\\ 110\\ 110\\ 110\\ \end{array}$	03 06 09 12 15 18 21 24 27 30 33 33 42 45 45 57 72 57 72 81 81 81 81 91 91 91 91 91 91 91 91 91 91 91 91 91	98 1 01 1 04 1 07 1 10 1 14 1 17 1 20	1 0 2 1 0 5 1 0 9 1 1 2 1 1 6 1 1 9 1 2 3 1 2 6 1 3 0	04 08 115 19 23 26 30 34 43 56 66 44 68 71 77 98 83 86 90 91 91 111 124 131 111 135 111 136 136 146 147 148 148 148 148 148 148 148 148	$\begin{smallmatrix}2&2&1&5&2&2&2&2&2&2&2&2&2&2&2&2&2&2&2&2&$	1 05 1 08 1 10 1 13 1 15 1 18 1 23 1 25 1 28 1 33 1 35 1 38 1 40 1 45 1 48 1 50 1 60 1 63 1 68 1 70 1 73 1 78 1 80	$\begin{array}{c} 1\ 1\ 6\\ 1\ 1\ 8\\ 1\ 1\ 2\ 1\\ 1\ 1\ 2\ 1\\ 1\ 1\ 2\ 1\\ 1\ 1\ 2\ 1\\ 1\ 2\ 1\\ 1\ 3\ 2\ 1\ 3\ 1\\ 1\ 3\ 2\ 1\ 3\ 1\ 3\ 1\\ 1\ 3\ 2\ 1\ 3\ 1\ 3\ 1\ 3\ 1\\ 1\ 3\ 1\$	$\begin{array}{c} 1\ 2\ 6\\ 1\ 2\ 9\\ 2\ 9\\ 1\ 1\ 3\ 5\\ 1\ 4\ 4\\ 1\ 1\ 4\ 7\\ 1\ 5\ 0\\ 1\ 5\ 0\\ 1\ 1\ 5\ 0\\ 1\ 1\ 5\ 0\\ 1\ 1\ 5\ 0\\ 1\ 1\ 1\ 5\ 0\\ 1\ 1\ 1\ 1\ 1\ 1\ 1\ 1\ 1\ 1\ 1\ 1\ 1\ $	1 79 1 82 1 85 1 89 1 92 1 95 1 98 2 02 2 05 2 08 2 11 2 15 2 18 2 21	1 44 1 5 8 1 1 4 7 1 1 6 8 1 1 5 8 1 1 6 5 8 1 1 5 8 1 1 6 5 9 1 1 6 5 1 1 7 8 1 1 6 5 1 1 7 8 1 1 8 2 1 1 7 5 1 1 8 8 1 1 7 5 1 1 8 8 9 1 2 0 6 1 2 1 0 6 2 2 1 1 4 2 2 9 3 1 2 2 1 1 2 2 2 1 1 2 2 2 1 2 2 2 1 2	

Pounds	50 Cents	55 Cents	60 Cents	65 Cents	70 Cents	75 Cents	Pounds	50 Cents	55 Cents	60 Cents	65 Cents	70 Cents	75 Cents
4 1 1 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0	2 7 3 2 7 5 5 2 7 8 8 5 2 8 8 5 2 9 8 5 2 9 5 5 2 9 8 5 2 9 8	2 9 2 2 9 4 2 9 7 3 0 0 0 3 0 3 3 0 5 3 1 1 1 6 3 1 4 6 3 1 6 6 3 1 9 8 3 2 2 5 6 3 2 5 6 3 2 7	3 45 3 48 3 51 3 54 3 57	3 77 3 86 3 87 3 87	2 9 1 4 2 9 1 1 2 9 1 2 9 1 3 1 5 1 9 1 2 2 6 9 1 3 3 1 5 1 9 2 2 6 9 3 2 3 3 6 0 3 3 4 3 7 5 5 4 7 5 8 2 5 6 7 1 5 8 6 8 8 9 9 2 6 8 1 3 3 9 2 6 9 2 6 1 3 1 3 9 9 2 6 1 3 1 3 9 9 2 6 1 3 1 3 9 9 2 6 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	4 35 4 39 4 43 4 46	780 785 790	$ \begin{array}{c} 3 & 0 & 5 & 5 & 8 \\ 3 & 0 & 5 & 6 & 8 \\ 3 & 1 & 0 & 3 & 1 \\ 3 & 1 & 5 & 8 & 0 \\ 3 & 2 & 0 & 3 & 2 \\ 3 & 2 & 3 & 3 & 5 \\ 3 & 3 & 3 & 3 & 4 \\ 4 & 0 & 3 & 3 & 5 \\ 3 & 3 & 3 & 5 & 8 \\ 3 & 3 & 5 & 8 \\ 3 & 3 & 5 & 8 \\ 3 & 3 & 6 & 8 \\ 3 & 3 & 6 & 8 \\ 3 & 3 & 6 & 8 \\ 3 & 3 & 6 & 8 \\ 3 & 3 & 6 & 8 \\ 3 & 3 & 9 & 9 \\ 3 & 3 & 3 & 3 \\ 3 & 3 & 9 & 9 \\ 3 & 3 & 3 & 3 \\ 3 & 3 & 9 & 9 \\ 3 & 3 & 3 & 3 \\ 3 & 3 & 9 & 9 \\ 3 & 3 & 3 & 3 \\ 3 & 3 & 9 & 9 \\ 3 & 3 & 3 & 3 \\ 3 & 3 & 9 & 9 \\ 3 & 3 & 3 & 9 \\ 4 & 3 & 8 & 9 \\ 3 & 3 & 9 & 9 \\ 3 $	$\begin{array}{c} 3\ 3\ 4\ 4\ 7\ 2\ 2\ 5\ 5\ 6\ 6\ 3\ 3\ 6\ 6\ 9\ 7\ 1\ 4\ 7\ 7\ 8\ 2\ 5\ 8\ 8\ 9\ 1\ 3\ 3\ 3\ 3\ 3\ 3\ 3\ 3\ 3\ 3\ 3\ 3\ 3\$	3 9 3 3 9 6 3 9 9 4 0 2 4 0 5 4 0 8 4 1 1	5 0 0 5 0 4 5 0 7 5 1 0 5 1 4 5 1 7	5 1 1 5 1 8 2 2 5 5 2 9 2 2 5 5 5 5 5 5 5 5 5 5 5 5	$\begin{array}{c} 4466693660488159360488155555555555555555$

Pounds 50 Cents	55 Cents		70 cents	75 Cents	Pounds	50 Cents	55 cents	60 Cents	65 Cents	70 Cents	75 Cents
805 4 0 0 3 8 10 0 4 0 0 5 8 10 0 4 0 10 3 8 15 0 4 0 10 3 8 15 0 4 0 10 3 8 15 0 4 0 10 3 8 15 0 4 0 10 3 8 15 0 4 0 10 3 8 15 0 0 10 4 0 10 3 8 15 0 0 10 4 0 10 3 8 15 0 0 10 4 0 10 3 8 15 0 0 10 10 10 10 10 10 10 10 10 10 10 10	$egin{array}{c} 4 & 4 & 9 & 9 & 9 & 0 & 0 & 0 & 1 & 1 & 1 & 1 & 2 & 2 & 2 & 3 & 3 & 3 & 4 & 4 & 4 & 4 & 5 & 5 & 5 & 5 & 5 & 5$	9 1 5 5 3 4 4 3 6 9 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5714 5714 5781 5781 5858 5959 6009 6616 6623 6623 6634 6644 66558 6665 6665 6676 6689	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1171 1171 1181 1181 1191	5 0 0 8 0 8 0 8 0 8 0 8 0 8 0 8 0 8 0 8	$\begin{array}{c} 5\ 5\ 6\ 8\ 6\ 7\ 7\ 8\ 0\ 3\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ 5\$	$\begin{array}{c} 6012181412470336921566666666666666666666666666666666666$	7 51 7 54 7 57 7 60 7 64 7 67	7 67 7 70 7 74 7 77 7 81 7 84 7 91 7 95 8 02 8 05 8 12 8 23 8 26 8 33	$\begin{array}{c} 7561593604881593600448155936004881559360044815593600488888888888888888888888888888888888$

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Pounds	50 Cents	55 cents	60 Cents	65 Cents	70 Cents	75 Cents	Pounds	50 Cents	55 cents	60 Cents	65 Cents	70 Cents	75 Cents
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Cotton Seed Table ber of Pounds. Black Face Type in first column is Number of Pounds. Black Face Type at top of each column is price per Ton.

Lbs.	63 50	\$3 75	34 00	\$4 25	\$4 50	\$4 75	\$5 00	\$5 25
123445050505050505050505050505050505050505	123456778901123445675207520752075207520752075224557802443388688688688443	123456789011234556789111155687658221088765821156876582212880876582228838888888888888888888888888888888	1 2 3 4 4 5 6 6 7 8 9 10 11 12 13 14 15 16 6 17 18 19 20 40 1 20 1 40 1 60 1 80 2 20 2 40 2 60 2 80 3 80 4 80 4 80 4 80 5 5 0 0	123456789011234457811111111111111111111111111111111111	10234567901123456890111234568901112345689011357002577021115802577025770257702577025770257702577025	12345789011345679222377158267371582673356037158267335555555555	112356780112356780112235050505050505050505050505050505050505	1123567901134578912234628517306285173062851730628517306665666666666666666666666666666666666

Cotton Seed Table The Black Face Type in first column is Number of Pounds. Black Face Type at top of each column is price per Ton.

Lbs.	\$ 5 50	\$5 75	\$6 00	\$6 25	\$6 50	\$6 75	\$7 00	\$7 25
1 2 3 4 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5	1 1 2 4 5 6 8 9 11 12 13 15 16 17 19 20 22 23 24 26 27 5 5 22 22 24 27 5 11 20 20 21 21 21 21 21 21 21 21 21 21 21 21 21	1 1 1 2 4 5 7 8 0 1 1 1 2 1 2 1 3 2 2 1 3 2 2 2 3 3 3 4 4 3 3 3 4 4 3 3 3 4 4 3 3 4 4 4 4 4 6 3 3 4 4 4 4	1 1 1 3 4 6 7 9 10 112 13 15 16 18 19 21 22 24 25 27 28 30 60 90 12 15 60 22 40 22 40 22 40 40 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	1134679012415718011222356891223567181222356891235678800122356891233435665718017581	1 1 1 3 4 6 8 9 1 1 1 3 4 6 8 9 1 1 1 3 2 2 4 4 2 2 7 2 3 0 2 2 3 2 3 2 3 2 2 3 3 2 2 3 3 3 3	11 11 13 56 80 11 11 13 56 81 11 13 15 16 18 22 21 22 23 23 23 23 23 23 23 23 23 23 23 23	1 1 1 1 1 1 1 1 3 5 7 8 10 12 14 15 17 19 12 12 24 26 28 29 31 33 50 10 10 10 10 10 10 10 10 10 1	1 1 1 1 1 3 5 7 9 10 12 14 16 18 19 21 23 22 25 27 29 32 4 32 4 5 1 2 5 4 5 1 5 6 6 6 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7

Cotton Seed Table ber of Pounds. Black Face Type in first column is Number of Pounds. Black Face Type at Top of each column is price per Ton.

Cotton Seed Table The Black Face Type in first column is Number of Pounds. Black Face Type at top of each column is price per Ton.

Lbs.	\$9.50	\$9.75	\$10.00	\$10.25	\$10.50	\$10.75	\$11.00	\$11.25
1 2 3 4 5 5 5 6 6 5 7 0 5 5 5 6 6 5 7 0 5 5 5 6 6 5 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	$\begin{array}{c} 1 \\ 1 \\ 2 \\ 4 \\ 7 \\ 9 \\ 1 \\ 1 \\ 1 \\ 6 \\ 9 \\ 1 \\ 1 \\ 1 \\ 2 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 4 \\ 4 \\ 7 \\ 5 \\ 2 \\ 2 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 4 \\ 4 \\ 7 \\ 5 \\ 2 \\ 3 \\ 3 \\ 3 \\ 2 \\ 7 \\ 7 \\ 6 \\ 6 \\ 6 \\ 6 \\ 6 \\ 7 \\ 7 \\ 6 \\ 6 \\ 6 \\ 6 \\ 7 \\ 7 \\ 8 \\ 8 \\ 9 \\ 9 \\ 9 \\ 9 \\ 9 \\ 9 \\ 9 \\ 9 \\ 9 \\ 9 \\ 10 \\ 11 \\ 11 \\ 11 \\ 11 \\ 11 \\ 11 \\ 11 \\ 11 \\ 11 \\ 11 \\ 11 \\ 11 \\ 11 \\ 11 \\ 12 \\ 12 \\ 12 \\ 11 \\ 12 \\ 11 \\ $	$\begin{array}{c} 1 \\ 1 \\ 2 \\ 4 \\ 7 \\ 9 \\ 21 \\ 17 \\ 121 \\ 226 \\ 9 \\ 11 \\ 222 \\ 314 \\ 436 \\ 976 \\ 55 \\ 332 \\ 436 \\ 9976 \\ 55 \\ 38276 \\ 556 \\ 382 \\ 7782 \\ 223 \\ 940 \\ 223 \\ 344 \\ 8876 \\ 556 \\ 66 \\ 382 \\ 7782 \\ 277 \\ 88776 \\ 556 \\ 66 \\ 67782 \\ 88776 \\ 5100 \\ 211 \\ 71$	$\begin{array}{c} 1 \\ 1 \\ 2 \\ 2 \\ 5 \\ 7 \\ 10 \\ 12 \\ 25 \\ 7 \\ 10 \\ 22 \\ 25 \\ 7 \\ 30 \\ 22 \\ 25 \\ 7 \\ 30 \\ 22 \\ 25 \\ 7 \\ 30 \\ 22 \\ 25 \\ 7 \\ 30 \\ 22 \\ 25 \\ 7 \\ 30 \\ 22 \\ 25 \\ 7 \\ 30 \\ 20 \\ 30 \\ 30 \\ 44 \\ 50 \\ 00 \\ 00 \\ 50 \\ 50 \\ 00 \\ 66 \\ 50 \\ 00 \\ 7 \\ 50 \\ 00 \\ 80 \\ 50 \\ 00 \\ 10 \\ 50 \\ 00 \\ 11 \\ 15 \\ 00 \\ 11 \\ 15 \\ 00 \\ 11 \\ 15 \\ 00 \\ 11 \\ 15 \\ 00 \\ 11 \\ 12 \\ 12 \\ 12 \\ 12 \\ 12 \\ 12$	1 1 1 2 2 2 5 7 7 10 12 2 1 1 5 7 10 1 2 2 3 3 3 3 3 5 5 3 3 4 4 6 6 4 8 5 1 1 5 5 6 3 5 6 6 6 6 6 7 7 6 8 8 7 2 1 2 5 6 6 6 6 6 7 7 6 8 8 7 2 1 2 3 0 1 1 1 1 2 3 0 1 1 1 1 2 3 1 1 2 8 1 1 2 1 2 8 1 1 2 1 2 8 1 1 2	1 1 1 2 2 2 5 7 7 10 1 2 2 1 15 8 2 1 1 1 1 2 2 2 2 6 8 3 1 4 2 4 4 1 7 2 2 3 1 6 7 7 8 4 9 2 5 7 7 7 8 8 9 4 9 7 5 0 2 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 2 2 5 8 8 10 3 1 1 8 8 1 1 3 1 1 6 1 8 8 1 1 3 1 1 6 1 1 8 8 1 1 1 1 2 2 4 4 4 5 1 3 7 7 6 1 1 5 8 2 2 2 3 2 4 4 5 5 3 7 6 6 7 8 2 6 6 7 8 2 6 6 7 8 2 6 6 7 8 2 6 6 7 8 2 9 10 10 1 1 1 2 2 3 2 3 3 3 3 3 1 1 1 1 1 1 1 1	1 1 2 2 2 5 8 1 1 1 1 3 3 1 1 6 6 6 6 1 5 1 1 2 2 2 3 3 3 5 8 8 4 4 4 4 6 4 9 5 0 5 0 6 6 6 5 1 7 1 7 0 5 5 8 8 8 3 5 0 9 9 4 5 1 0 0 0 5 5 1 1 2 2 2 3 3 7 5 1 2 3 3 7 5 1 1 2 1 3 3 7 5 1 1 3 1 3 7 5 1 1 3	1 1 2 2 5 8 1 1 4 1 6 1 9 2 2 5 8 3 3 6 9 4 4 5 7 3 8 4 3 9 3 5 6 6 6 7 7 7 8 4 9 9 5 1 2 2 2 3 3 3 4 5 5 6 6 7 7 7 8 9 9 5 1 2 2 2 3 3 3 5 0 6 2 3 1 1 2 2 2 3 3 3 1 4 5 5 6 6 7 7 8 9 9 5 1 2 2 2 3 3 3 5 0 6 7 7 8 9 9 7

Cotton Seed Table The Black Face Type in first column is Number of Pounds. Black Face Type at Top of each column is price per Ton.

Cotton Seed Table The Black Face Type in first column is Number of Pounds. Black Face Type at top of each column is price per Ton.

1	Lbs.	\$13.75	\$14.00	\$14.25	\$14.50	\$14.75	\$15.00	\$15.25	\$15.50	\$15.75
3 2		1								
5 4	3	2	2	2	2	2	2	2	2	2
10		3 4	3	3	3	3	3	3	3 4	
20	10	7	7	7	7	7	7	8	8	. 8
17										12 16
35 24 25 25 25 26 27 27 28 40 28 28 29 29 30 30 31 32 32 32 32 33 34 34 35 35 35 36 36 37 37 37 38 39 39 40 40 41 42 43 43 44 </td <td>2 5</td> <td>17</td> <td>18</td> <td>18</td> <td>18</td> <td>18</td> <td>19</td> <td>19</td> <td>20</td> <td>20</td>	2 5	17	18	18	18	18	19	19	20	20
40 28 28 29 29 30 30 30 31 32 35 36 36 37 37 37 38 39 40 40 41 42 43 43 43 44 45 47 48 49 50<				21	22	22		$\frac{22}{27}$		
50 35 35 36 36 37 37 37 38 39 43 43 44 42 43 43 44 44 45 43 43 44 44 45 50 50 51 50 50 50 51 70 48 49 50 51 52 53 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 70 70 71 73 74 75 72 74 75 74 76 67 69 70 71 72 74 75 76 66 67 68 70 70 70 70 71 72 74 75 76 70 70 70 70 70 70 70 70 70 70 70 71 72 74 75 76 70<	4 0	28	28	29	29	30	30	30	31	3 2
55 38 39 39 40 40 41 42 43 47 48 49 50 50 551 55 56 57 58 59 50 60 61 63 64 65 66 67 68 70 70 71 72 74 75 74 75 74 75 74 75 74 77 78 74 75 76 77 78 74 75 77 78 74 75 76 77 78 74 75 76 77 78 74 75 76 77 78 74 75 76 77 78 74	4 5 5 0				32			34		35
65 44 46 46 47 48 49 50 51 52 53 53 54 55 75 51 53 53 54 55 56 57 58 59 80 55 56 57 58 59 60 61 62 63 85 58 60 60 61 63 64 65 66 67 70 70 95 69 70 71 72 74 75 76 77 74 75 200 138 140 214 218 222 225 229 232 235 403 275 280 285 290 296 300 305 310 315 500 343 350 356 363 370 375 381 388 393 800 550 560 570 580	5 5	38	39	39	40	40	41	42	43	43
70										
80 55 56 57 58 59 60 61 62 63 95 65 67 60 61 63 64 65 66 67 68 70 70 70 70 70 70 70 71 72 74 75 76 77 78 74 75 76 77 78 74 75 76 77 78 74 75 76 77 78 74 75 76 77 78 74 75 76 77 78 74 75 76 77 78 74 75 76 77 78 74 75 76 77 78 74 75 76 77 78 74 75 76 77 78 156 300 300 300 300 300 300 300 300 300 300 300 300 300 300	70	48	49	50	51	52	53	53	54	55
85 58 60 60 61 63 64 65 66 67 70<						55 59				59 63
95 65 67 67 69 70 71 72 74 75 100 69 70 71 73 74 75 76 77 78 200 138 140 143 146 148 150 153 154 154 300 206 210 214 218 222 225 229 232 235 403 275 280 285 290 296 300 305 310 315 500 343 350 356 363 370 375 381 388 393 600 413 420 428 435 443 450 458 472 700 483 490 499 508 580 590 600 610 620 630 900 619 630 642 653 664 675 686 698 708	8 5	58	60	60	61	63	64	65	66	67
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		62	63							
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	100	69	70	71	73	74	75	76	77	78
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		1 38	1 40					153	154	1 56
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		2 75	2 80	285	290	296	3 0 0	3 0 5	3 1 0	3 1 5
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		3 4 3			3 63					
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		4 83	4 9 0	4 9 9	5 0 8	5 18	5 2 5	5 3 4	5 4 3	5 5 1
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		5 50	5 60		580					
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			7 00	7 1 3	7 2 5	7 38	7 50	7 63	7 7 6	787
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1100	7 5 7			7 98					
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1300	1894	9 1 0	9 27	9 4 3.	9 5 9	9 75	991	10 08	10 24
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1400	9 63					10 50			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				11 41	11 60	1181	12 00	12 20	12 40	12 60
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				12 12	12 33	12 55				13 39
2100		13 06		13 55	13 78	14 01	14 25	14 48	1473	1498
2200 15 13 15 40 15 67 15 95 16 23 16 50 16 78 17 06 17 33 2300 15 81 16 10 16 39 16 68 16 96 17 25 17 54 17 83 18 11 2400 16 50 16 80 17 10 17 40 17 72 18 00 18 30 18 60 18 90	2000	13 75		14 25	14 50					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2200	15 13	15 40	15 67	15 95	16 23	16 50	16 78	1706	17 33
2400 110 301 10 30 110 11 12 10 11 12 110 00 110 00 110 00	2300			16 39						
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Cotton Seed Table ber of Pounds. Black Face Type in first column is Number of Pounds. Black Face Type at top of each column is price per Ton.

Cotton Seed Table The Black Face Type in first column is Number of Pounds. Black Face Type at Top of each column is price per Ton.

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